Global Scientific JOURNALS
GSJ: Volume 10, Issue 3, March 2022, Online: ISSN 2320-9186
www.globalscientificjournal.com

# SOCIODEMOGRAPHIC PROFILE, KNOWLEDGE, AND ATTITUDE OF RESIDENTS IN BARANGAY MATINA CROSSING, DAVAO CITY ON COVID-19 AS PREDICTORS OF THE MITIGATION PRACTICES

A Thesis

Presented to

The Faculty of the Graduate School

University of the Immaculate Conception

Davao City



In Partial Fulfillment

of the Requirements for the Degree

Master of Science in Medical Technology

major in Biomedical Science

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December 2021

## ACKNOWLEDGEMENT

The researcher would like to express his profound gratitude and sincere appreciation to the following people for their generous support, inspiration, and professional direction:

To Gabriel G. Ponce de Leon, RMT, AMT, ASCPi, MS, the researcher's adviser, for his brilliant insights, comments, and suggestions. His ceaseless guidance, unfaltering assistance, encouragement, and intellectual support lead the researcher towards the completion of this research;

To Dr. Renan P. Limjuco, the technical panel chairperson and Dr. Avee Joy B. Dayaganon, and Queen Jane M. Bacon, RMT, CSMS, MSMT, members, for their knowledge, dedication, suggestions, and technical assistance. Their superb scrutiny on every detail and content of this research made this work more substantial and comprehensive;

To Dr. Avee Joy B. Dayaganon, Queen Jane M. Bacon, RMT, CSMS, MSMT, and Rey Anthony Perez, RMT, MSMT, the validators, for making his survey questionnaire more accurate and well-founded;

To Rvin John T. Servillon, RMT, MSMT, SMRIEdr, for the assistance given in the statistical work and data analysis that led to the completion of this study;

To Dr. Virgion H. Mamonong, for making his survey questionnaire more understandable and reliable;

To honorable Joel Santes, the Barangay Captain of Barangay Matina Crossing, Davao City, for allowing the researcher to gather the data needed in the research locale and encouraging the residents to participate in the study;

To Mama Elnor, Papa Marcelino, Ate Jhona, Kuya Felix Jr., Anthony Rusty, and Ruzzel Curt, for being his greatest inspirations throughout this journey;

To, Mama Lenie, and Papa Felix Sr., my late biological parents, thank you for guiding him from up above;

To Dr. Avee Joy Dayaganon, Dean of Graduate School, for being the core in establishing well the Graduate School Program of this University; and

To the Lord Almighty, who have blessed the researcher with the gift of faith and courage, for making things possible to complete this study in an almost impossible situation during this COVID-19 pandemic. Your grace and mercy are powerful. The researcher gives you thanks for giving him a sound mind and spirit throughout this academic endeavor.

## ABSTRACT

This study aimed to determine if the sociodemographic profile, knowledge, and attitude of residents in Barangay Matina Crossing, Davao City, were predictors of mitigation practices against COVID-19. The research design was descriptive correlational research. The respondents who participated in the study were identified using stratified random sampling. Further, a purposive sampling technique was used to obtain seven respondents per stratum. The Mean and Standard Deviation were used to get the average rate and spread of scores within the given data. Furthermore, Multiple Regression Analysis was used to evaluate if the sociodemographic profile, knowledge, and attitude were predictors of mitigation practices. Results showed that the mean knowledge score was very high. Also, results showed that the mean attitude score was high. Likewise, the mean mitigation practices score was very high. Moreover, the sociodemographic profile did not significantly influence the level of COVID-19 mitigation practices. Notably, the knowledge and attitude mean scores significantly influenced the COVID-19 mitigation practices of the respondents. The residents of Barangay Matina Crossing, Davao City have a good grasp of relevant knowledge, positive attitudes, and mitigation practices concerning protective behaviors on COVID-19.

*Keywords*: Medical Technology, sociodemographic profile, knowledge, attitude, mitigation practices, COVID-19, descriptive correlational research, Philippines

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# CHAPTER 1

## INTRODUCTION

### Background of the Study

Filipinos do not follow the required minimum health standards, including wearing masks in public places, washing hands, staying at home, and doing social distancing to avoid Coronavirus disease (COVID-19). Experts and studies note that observing these practices can greatly reduce the risk of contracting and spreading the disease. This means that the failure to follow and implement health protocols poses a challenge in stopping the spread of the virus because it facilitates the transfer of the virus among people, allowing the disease to remain widespread (Tomacruz, 2020).

As of March 7, 2021, over 2.7 million new cases of Coronavirus disease were reported. The global case increase was driven by increases in the Eastern Mediterranean (10%), African Region (10%), and Europe (4%) (WHO, 2021). India is one of the countries which have increased total cases of COVID-19 infection, adding up to 30,362,848 (Worldometer, 2021). Not following the necessary mitigation practices, such as wearing a mask, regular hand washing, and avoiding direct contact with infected persons, are the reasons why there is a surge of infection in the said country (Kumar et al., 2020). Furthermore, the Philippines ranks 24$^{th}$ worldwide for having increased COVID-19 cases totaling 1,408,058 (Worldometer, 2021).

According to Gonzales (2021), Filipinos do not follow the required minimum standards. Failure in doing so induces a challenge in eradicating the spread of the

virus since it enables the transmission of the virus among individuals, permitting the disease to spread continuously. In Davao City, the Department of Health (DOH) has noted an increase in the number of COVID-19 cases, with the observance of minimum health protocols being one of the current challenges of the city government. In an online press briefing, Health Undersecretary Maria Rosario Vergeire said that DOH is coordinating with Davao City officials regarding the increase in the number of COVID-19 cases in their jurisdiction. Citing information from Davao's Regional Epidemiology and Surveillance Unit, Vergeire added that minimum health standards compliance is one of the challenges the Local Government Unit faces. Based on the case bulletin issued by the DOH, Davao City topped areas in the country with the highest new cases, having 1,086. Based on DOH's data, Davao City has already recorded a total of 10,340 COVID-19 cases, consisting of 1,435 active cases, 8,574 recoveries, and 331 deaths (Gonzales, 2021).

Despite the rise, the Philippine government continues to implement various actions, which includes: community quarantine; expansion of testing aptitude, which started from a single Reference Laboratory with the Research Institute of Tropical Medicine (RITM) to 23 registered testing laboratories all over the archipelago; conducting actions to assure health care system to contain bulk patients; accommodating the financial needs to address services towards in need of isolation; quarantine and hospital admission, and resolving economic and social impact to the society via social amelioration among low-income families (Tomacruz, 2020).

However, because of the transmissible nature of COVID-19, the leniency facilitation of quarantine constraints, recurrent movement of individuals, and not observing health mandates all contribute to the continual spread of infection in certain places (Tomacruz, 2020).

On the one hand, the study conducted by Gao et al. (2020), titled, "Knowledge, attitudes, and practices of the Chinese public for coronavirus disease (COVID-19): an online cross-sectional survey," revealed that there is a variable composition of samples due to the conduct of the online survey, which makes the females participate more than males as well as the medical staff (who have a high education level) and young people. Therefore, the generalizability of the research results has certain limitations. On the other hand, according to the study of Banik et al. (2021), titled, "Investigating knowledge, attitudes, and practices related to COVID-19 outbreak among Bangladeshi young adults: A web-based cross-sectional analysis", there is a possibility of bias as underprivileged populations may not have been able to participate in the study, thereby restricted to only those with internet access, and consequently unlikely to represent an accurate sample of the whole Bangladeshi young adults. Thus, based on the limitations of the study conducted by the other authors, the researcher will conduct a face-to-face distribution of the survey questionnaire and select the potential respondents based on the set inclusion-exclusion criteria.

Further, based on the study of Tomar et al. (2021), there is evidence on the positive and significant correlations between knowledge-attitudes, knowledge-practice, and attitudes-practices among the respondents. This reaffirms that better

knowledge and attitudes are associated with better mitigation practices. Therefore, health authorities should intensify their efforts to improve health services and give equal importance to raising people's awareness and knowledge towards COVID-19 (Al ahdab, 2021).

Furthermore, Ferdous et al. (2020) found that the sociodemographic factors associated with more mitigation practices were being female, older age, having higher education, higher income, urban area residence, and having more positive attitudes. Male gender, occupation of "students," COVID-19 knowledge score, marital status, and residence were significantly associated factors.

Additionally, according to the KAP model, knowledge is the basis, and attitude is the driving force of behavior change. Therefore, improving people's knowledge and fostering positive attitudes towards epidemic prevention are indispensable for improving protective behavior to fight against the COVID-19 pandemic (Gao et al., 2020).

Through this study, we will be able to know the frequency of sociodemographic profile of the respondents in Barangay Matina Crossing, Davao City; measure the level of knowledge, attitude, and mitigation practices of the respondents with regards to COVID-19; and evaluate if the sociodemographic profile, knowledge, and attitude are predictors for mitigation practices of the respondents.

Lastly, the findings of the study will be presented to the academic institution where the researcher is currently employed and to the Department of Health. Likewise, this will be disseminated through local, national or even international

research fora and publication to a referred journal. The result will also be available and open for access to be used as a reference by other scholars, organizations and future researchers.

**Statement of the Problem**

This study aimed to determine whether the sociodemographic profile, knowledge, and attitude on COVID-19 of the residents in Barangay Matina Crossing, Davao City, are predictors of their mitigation practices against COVID-19. Specifically, this study sought to answer the following questions:

1. What is the sociodemographic profile of the respondents in terms of:
    1.1. sex;
    1.2. age;
    1.3. ethnicity;
    1.4. marital status;
    1.5. educational level; and
    1.6. occupation?
2. What is the level of knowledge regarding COVID-19 of the respondents?
3. What is the level of attitude regarding COVID-19 of the respondents?
4. What is the level of mitigation practices regarding COVID-19 of the respondents?
5. Do the respondents' sociodemographic profile, knowledge, and attitude significantly influence their mitigation practices against COVID-19?

## Review of Related Literature

The review of related literature includes information from different authors vital to this study. This section discusses the Sociodemographic Profile and its domains, Knowledge, Attitude, and Mitigation practices.

### Sociodemographic Profile

Sociodemography of statuses mirrors an individual's demographic and social roles and attainments in a population. In the theoretical frameworks, little was recognized about the theory, analytical methods, and evolutionary mechanism of the socio-demographics of standings of an individual. In research, sociodemographic features of a population or person have been essentially examined to offer a connected understanding of a particular phenomenon. For instance, in medical research, lifestyle illnesses, disease incidences, disease severity, and disease vulnerability are associated with socio-demography (Abdullahi, 2020).

**Sex.** This refers to a set of biological qualities in humans and animals related to physical and physiological characteristics, including hormone function, chromosomes, gene expression, and reproductive anatomy. Sex is typically characterized as female or male, although there is a difference in the physical qualities that establish sex and how those traits are conveyed (Heidari et al., 2016. According to the study of Gao et al. (2020), outcomes exhibited that females got high mean scores of mitigation practice regarding Coronavirus disease than males (55.86 ± 4.93 vs. 55.37 ± 5.24). In addition, it has been shown that women are higher than men in terms of the practices (wearing a mask, hand hygiene) linked

to infectious diseases (e.g., MERS, H1N1 and SARS, and others). This gender variance has been shown in a handful of researches as depicted by a better score on Knowledge, Attitude, and Practices (KAP) of females than males, as well as correct and lucid defensive measurements to lessen the danger of human-to-human transmission and loathing to wild animal intake. These outcomes propose that gender possibly affects students' answers to the COVID-19 pandemic and attainment of public health education, which should be drawn consciousness to education and health experts. These aspects should also be accounted to express exigency strategies or drills for the students against the same public health crises in the future (Peng et al., 2020).

Moreover, the possibly deprived recognized practices were related to younger age males. This is in settlement with the results of the same COVID-19 researchers in China and Iran. The result that women were more likely to conduct non-pharmaceutical health lifestyles (e.g., wearing a mask) is also constant with a former study on SARS contagion (Al ahdab, 2021). Furthermore, influences interface with unsuitable deterrent practices was male. This research reveals that male respondents had hypothetically unsuitable practices and an increased risk of COVID-19 (Banik et al., 2021).

**Age.** It is the period of life at which some specific requirement, power, or ability ascends or rests. It is one of the phases of life or the span of existence ranging from the start to any given time (Merriam-Webster, 2021). According to Al ahdab (2021), there is an indication that late youngsters were more likely to involve in risk-taking actions regarding Coronavirus disease. In addition, according

to the study of Ferdous et al. (2020), it has exposed and reduced exact knowledge, positive attitudes, and recurrent practices about COVID-19. The study shows a significant gap, likely reflecting suboptimal community health evidence and distribution about COVID-19, specifically since, as indicated, the survey chiefly sampled accomplished younger individuals with ready admittance to different information bases. Indeed, more exact knowledge was meaningfully more likely among new adults.

**Ethnicity.** It came from the Greek adjective Ethnikos which pertains to “heathen.” The adjective is obtained from the term ethnos, which pertains to foreign individuals or countries. It is a multi-layered idea that shapes a person's individuality through relationships, language, religion, common land and race, and physical features (Santos et al., 2010). According to the study of Affognon et al. (2017), more individuals in the Borana society group appeal appropriate practices, such as wearing gloves when managing sickening animals, taking upkeep of abandoned fetuses, and serving animals to deliver as equated to the Turkana who were more high-flown by Rocky Valley Fever (RVF). Many developing illnesses are zoonotic infectious diseases spread between animals and persons; examples comprise RVF. Doing good practices by wearing gloves can meaningfully decrease the danger of being diseased through the transference of the disease between animals and persons. This can be elucidated by the detail that the Borana and Maasai were significantly more educationally accomplished than Turkana, as tested by the average number of years of schooling of the home heads.

**Marital Status.** It is the lawfully described marital state. There are numerous kinds of marital status: single, married, divorced, widowed, disconnected, and, in some instances, registered collaboration. Never married individuals are those who never got married in compliance with legal rules. Married individuals are married before a proficient body in obedience to legal guidelines (EuroStat, 2019). Based on the findings of Erfani et al. (2020), the practice regarding COVID-19 score was significantly increased among married individuals. Furthermore, research made among 404 severe illness persons in Ethiopia specified that the marital status of not married is one of the reasons significantly linked with poor practice (Wake, 2020).

**Educational Level.** It denotes the uppermost level of education that a person has finished. This is dissimilar from the level of schooling that a person is joining (United States Census Bureau, 2020). Research shows that youngsters from public schools and medical programs displayed a higher score regarding COVID-19 related knowledge. The typical educational circumstances in China could elucidate this. Since the previous two decades, private schools have been instigated to be recognized as role players in addition to the public educational scheme as per governmental rules. Relating to private schools, public schools have been naturally larger in their numbers, quality, the quantity of students and educators, guidance from the communities, etc. Medical students presented an excellent score of knowledge that could be clarified by their clinical medicine and community health seminars. Their responsibilities and duties to combat this

pandemic as future medical specialists drive them to show more positive attitudes and active practices during this public health crisis (Peng et al., 2020).

**Occupation.** It pertains to a type of work conducted in a job. The notion of occupation is described as a "set of works whose primary duties are categorized by a great degree of resemblance. An individual may be linked with work through the primary job presently conducted, a second work, future work, or formerly held job (International Labour Office, 2012). Based on Al ahdab (2021), it is predictable that unemployment was also linked with deprived practices due to having less contact with the COVID-19 virus. Thus, the unemployed are likely to be less connected to health security methods of wearing a facemask and social distancing.

**Knowledge**

It is reflected as a group of experience, right information, and skilled perception, which gives an idea for approximating and incorporating new encounters and information. Because of the current growth of science and technology, knowledge develops an integral part in every institution. In institutions, knowledge is defined as a depot of intelligence for the progress of the organizations. Attainment of new knowledge is one of the utmost trials in constructing intelligent schemes per institution (Mohajan, 2016). The knowledge-producing circumstances marked both externally and internally in the truth manifesting outside a person's mental capacity that validates the evidence of an intention, within the psychological conditions of those who expand knowledge, authentications of dependable reasoning procedures (Agarwal, 2017).

**Clinical Presentations of COVID-19.** Individuals of all ages are sensitive to COVID-19 contagion. Youngsters under 18 years signify fewer than (2%) of the established COVID-19 cases. Some research shows that many infected children have no symptoms or encounter slight symptoms during the COVID-19 pandemic. Of the infected children, (11%) need hospitalization. Most children survive the illness, and death in connection to COVID-19 is rare in cases aged less than 18 years. In a cohort of 100 children sent to hospitals in Italy, low-grade fever (54%), cough (44%), and atrophy (23%) were manifested. Chronic disease was detected in (1–2%) of the cases (Kermani et al., 2020).

The usual clinical manifestations of COVID-19 pneumonia in adults include headache, dry cough, breathlessness, sore throat, fever, fatigue, and myalgia. The disease appearances in the infected persons range from slight pneumonia (81%) to moderate pneumonia and severe cases (leading to offensive mechanical ventilation, multiorgan problems, and probably death, 5%). The danger of demise depends on age, primary comorbidities, and sternness of the illness, growing up to (49%) in severely ill persons. Epidemiologic data from China show that liberated of age, males are at higher risk for the emergence of chronic COVID-19 compared with females. Other comorbidities comprising cardiovascular complications, chronic kidney problems, severe lung complications, diabetes, and tumors are linked with a high risk of severity caused by COVID-19. Obese patients, as termed by BMI of at least 30 $Kg/m^2$, are at higher risk of eradicating the illness and the need for intensive care unit (ICU) care. It has conveyed that elderlies (odds ratio 1.10, 95% CI: 1.03–1.17, per year increase; p = 0.0043), increase successive

organ failure assessment (SOFA) score (5.65, 2.61–12.23; p < 0.0001), and D-dimer of higher than 1 μg/ml on entry (18.42, 2.64–128.55; p = 0.0033) were suggestively connected with the mortality of adult inpatients with COVID-19 in Wuhan, China. Healing was detected in the second or third week from the beginning of the symptom. The median duration of hospitalization in individuals who recovered was ten days. The most affected organs were the lungs, followed by the heart, kidneys, liver, brain, and gastrointestinal system (Kermani et al., 2020).

According to data obtained from a series of rheumatoid arthritis patients on immunosuppressive therapies, the clinical course of COVID-19 does not seem to be significantly affected by the biological disease-modifying antirheumatic drugs (bDMARDs) or targeted synthetic disease-modifying antirheumatic drugs (tsDMARDs). As opposed to the rheumatoid arthritis population, organ transplant recipients are at a very high risk of death related to COVID-19; (28%) of the cases of kidney transplants at Montefiore Medical Center, New York City, died due to COVID-19 (Kermani et al., 2020).

**The severity of COVID 19.** An emergent public-health problem, especially under the circumstance of an entirely novel pathogen, is to predict the severity of the disease for each patient. For medical treatment, this issue concerns the reputation of the clinician, the life of the patients, and the therapeutic effects, especially under the conditions of a novel disease and a lack of essential medical resources (Zhang et al., 2021). Disease prevention is related to crucial policymaking. Specifically, disease severity in different regions could affect the

distribution and redeployment of medical staff, equipment, and financial appropriation during the pandemic. In addition, it could need to be traded off against economic-, social-, and personal-freedom costs, such as wearing masks and maintaining social distancing, shutting down factories and schools, and imposing travel restrictions. Above all, knowledge about the severity of COVID-19 affects every aspect of the community. According to the guidelines of the World Health Organization (WHO) and the National Health Commission of the PRC, the severity of COVID-19 can be classified into four types based on the patient's symptoms, laboratory results, and imaging findings at admission: mild, moderate, severe, and critical. Considering the severity of COVID-19, it is crucial to predict the progression of the illness based on evaluable determinants. Previous studies explored and analyzed the association between risk factors and the severity of COVID-19. The risk factors could be divided into several types: individual factors (such as gender, age, residential location, and occupation), symptom factors (such as cough and fever), comorbidity factors (such as cancer, diabetes, psychiatric disorders, nephritis, and obesity), laboratory factors, radiographic factors, exposure factors, treatment factors, environmental factors, social factors, and regional factors. Many empirical studies were conducted to discuss this association in the Chinese context. Among these studies, most reported clinical characteristics of confirmed COVID-19 cases based on different regions, collecting individual, epidemiological, clinical, laboratory, computed tomography-imaging, and outcome data. However, no systematic review or meta-analysis summarizes all results based on an analytical framework. In addition, there is no

comprehensive classification of all determinants. Therefore, based on the above findings, this study aimed to examine the prevalence of severe COVID-19 and its relationship with other risk factors in China by conducting a systematic review and meta-analysis. This meta-analysis could provide a systemic classification of factors of determinants and the most comprehensive results of this subject (Zhang et al., 2021).

**Attitude**

An attitude is an evaluation of an object of thought. Attitude objects comprise anything a person may hold in mind, ranging from the mundane to the abstract, including things, people, groups, and ideas (Bohner & Dickel, 2011). This can vary in two important ways when conceptualized as an evaluative judgment. First, attitudes can differ in valence or direction. Some attitudes that a person possesses are positive, others are negative, and others are neutral. Second, attitudes can differ in strength ( Haddock & Maio, 2007).

Current conceptions of attitude do not adequately distinguish between attitudes and factual beliefs on the one hand or between attitudes and preferences on the other. To hold an attitude is to ascribe an objective moral property to the attitude-object; however, the conception of such properties rests on an incoherent theory of relations as constitutive of their terms, and the belief in them has only pseudo-cognitive content. Moralism, or the maintaining of attitudes, is a unique technique for disguising and promoting interests. Attitudes serve as rationalizations for concealed or unconscious impulses and are defended by further rationalizations. These considerations call into question some standard

techniques of attitude assessment. Some apparent exceptions, namely 'aesthetic attitudes' and 'authentic values,' reveal themselves *to* be either (a) factual beliefs about aesthetic properties or about human motivation, respectively, (b) preferences, or (c) moral attitudes as defined. Moralism is not essential to socialization and is inimical to the 'social feelings' (Maze, 2008).

**Measures Adopted for COVID-19 Prevention.** Every country should be implementing a comprehensive set of measures, calibrated to their capacity and context, to slow down transmission and reduce mortality associated with COVID-19, ultimately to reach and/or maintain a steady state of low-level or no transmission. Appropriate strategies at the national level and sub-national level must balance measures that address the direct mortality attributable to COVID-19; the indirect mortality caused by the overwhelming of health systems and the interruption of other essential health and social services; and the acute and long-term detrimental effects on health and wellbeing of the socioeconomic consequences of certain response measures. Maintaining a steady state of low-level or no transmission is essential because, as the pandemic has spread, its public health and socioeconomic impacts have been profound and have disproportionately affected the vulnerable. Many populations have already experienced a lack of access to routine, essential health services. Migrants, refugees, displaced populations, and residents of high-density and informal settlements are at exceptionally high risk from the interruption of already limited health and social services. The closure of schools increases the risk of some students being neglected, abused, or exploited, and risks the interruption of

essential services such as school meals. Every action taken now to slow the transmission of COVID-19 is an action that brings forward the day that these services can return. The risk of re-introduction and resurgence of the disease will continue and will need to be sustainably controlled through the rigorous application of public health interventions as the virus circulates between and within countries. Ultimately, the development and delivery of a safe and effective vaccine or vaccines and therapeutics may enable a transition away from some of the measures necessary to maintain this state of low-level or no transmission (WHO, 2020).

**Confidence in Winning the Battle Against COVID-19.** It is vital to protect the community from exposure to the infection. All residents in the potential risk areas were encouraged to stay at home, which effectively blocks the transmission routes. Local community health workers and volunteers, after the specific training, proactively participate in screening the suspicious infections and help in implementing proper quarantine measures by providing support services, such as driving patients to the mobile hospitals. All those activities are logistically managed at the community level. At the same time, from the medical care side, the medical doctors and nurses worked very hard in the hospitals to screen the suspected cases, provide medical care for the confirmed cases, and take emergency response to rescue severe patients to reduce the fatality. While epidemiologists working in centers for disease control and preventions provided the statistical results for the dissemination of epidemiological data correctly and provided the well-prepared datasets for the decision-makers for coordination of necessary

resources, many health workers investigate the suspected contractors for quick medical quarantine of the suspected cases at the community level (Qian et al., 2020).

**Mitigation Practices**

The term "mitigation" can be comprised of the term "prevention." Mitigation means reducing the severity of the human and material damage caused by the disaster. Primary prevention is to reduce -avert- avoid the risk of the event occurring by getting rid of the hazard or vulnerability. Healthier people in a healthy environment will be less vulnerable to most hazards. Secondary prevention means recognizing the event promptly and reducing its effects. Healthier people in a healthy environment will also be more capable of overcoming the emergency. The objective of prevention is to reduce the risk of being affected by a disaster. Even if the hazard cannot be removed, vulnerability can be decreased, and in case of an impact, the capacity to withstand, respond, and recover will be more vital (WHO, 1999). According to Zhong et al. (2020) in China, the respondents have an appropriate practice towards COVID-19. It is said that the majority of the respondents wore facemask and face shield due to the availability of a quality facemask and face shield at a lower price compared during the early stages of infection where it reached its price surge by 6 to 10 folds. It could also be the result of the residents' good knowledge regarding the high infectivity of the COVID-19 virus, which can be easily transmitted between people via invisible respiratory droplets.

**Avoidance Behavior.** Information regarding avoidance can result from overexposure to health topics that receive an abundance of attention in the media. In a recent survey, two-thirds of participants reported feeling the need to take breaks from the news on COVID-19. While this may help individuals remain calm, it also implies that they can miss out on crucial novel information (e.g., additional preventive measures, rising incidences in their area of residence) or may even underestimate the severity of the situation, no longer being confronted with it. Thereby, avoiding information about COVID-19 could result in intentional or unintentional worse compliance with preventive measures, with severe consequences for crisis management. In line with this, information avoidance has been associated with lower compliance to preventive behaviors in other health domains. However, to our knowledge, information avoidance and its potential consequences have not yet been assessed in a global health crisis.

We set out to examine whether distress caused by information about COVID-19, avoidance of information, and compliance with preventive measures in the case of COVID-19 are interrelated. We expected that a higher level of distress by information is associated with more avoidance of information (avoidance hypothesis) and that more avoidance of information is associated with worse compliance with preventive measures (compliance hypothesis) (Siebenhaar et al., 2020).

**Personal Habits Practice.** With people advised to observe physical distancing and good hygiene habits amidst the pandemic, health experts have constantly reminded that the simple practice of handwashing with soap and clean

water is also one of the most effective ways to prevent the spread of germs and viruses. For Bolanle Popoola, a laboratory technician, imbibing the act of handwashing regularly with soap had required deliberate effort despite the knowledge that this could save her and her family from contracting infections and prevent them from spreading germs and viruses. She explained that she found it easier to continue with her work without washing her hands with soap because she most times wears a glove. "With the COVID-19 pandemic, I have been taking extra effort to wash my hands with soap and water. I knew this before the outbreak, but there are times you neglect doing the right thing. We are told right from childhood to always wash our hands after playing, before eating, after using the toilet, and as often as possible. Handwashing is not only for people working in laboratories or hospitals. It is for everybody. You do not know what bacteria or germ you might have picked from the rails, from door handles, or other surfaces" (Abuja, 2020).

**Sociodemographic Profile and Mitigation Practices**

According to the study of Gao et al. (2020), the majority of the public adhered to sound practices concerning COVID-19 infection, potentially because they had good COVID-19 knowledge and a positive attitude, which ultimately translates into good practice. However, the population younger than 32 years old (the median age of the study subjects) had less knowledge than their counterparts, which is potentially attributed to the increases in social experience and knowledge reserves with age. Marital status, education, occupation, and place of residence all had impacts on KAP. Married people had a better grasp of knowledge, more active protective attitudes, and higher adherence rates to protective behaviors than

unmarried, divorced, or widowed individuals. This may be because married people have the responsibility of caring for their families in addition to self-protection. Therefore, they tend to learn more about protection, have a more positive attitude, and engage in proactive protective actions. People with a college degree or above had better KAP than their counterparts. Higher degrees may correlate with broader knowledge and more robust learning ability, making it easier to grasp the relevant knowledge regarding COVID-19, adopt a protective attitude and be more positive. It has been suggested that health education should be targeted at people with different educational levels and different needs for health education. For the less educated population, easy-to-understand publicity materials may be more effective. Medical personnel had more knowledge, better attitudes, and higher behavior scores than nonmedical respondents because medical personnel generally have a college degree or higher and have received more professional medical training. Hence, in preventing and controlling COVID-19, the average person needs more education on knowledge regarding COVID19 than medical staff. Compared with rural or urban residents, those living in cities had higher KAP scores, which was potentially due to the following reasons: (a) Information sources are more available and spread faster in cities, and people can obtain first-hand information quickly, (b) The cultural literacy of city residents is generally higher than that of people living in rural or urban areas, (c) The composition of people in the city is more complex, and the population density is high, which increases the likelihood of COVID-19 dissemination. As a result, citizens are more proactive in epidemic prevention, (d) Medical and protective supplies in cities are more

abundant than in rural areas, and citizens thus have more opportunities to obtain relevant protective supplies and take protective action.

In addition, results indicate that the majority of Chinese undergraduate students have acquired the basic knowledge of COVID-19, but their performance may vary by school types and majors. Attitude towards COVID-19 shows a gender disparity. Most Chinese undergraduate students understood the basic information, possessed a positive attitude, and presented proactive practice towards the outbreak of COVID-19, indicating the efficacy and success of current public health campaigns. However, results also revealed that gender, major, and school types should be considered when health and education authorities tailor public health training and improve preventative measures against this epidemic (Peng et al., 2020).

In the multiple logistic regression analyses, sociodemographic variables associated with more positive attitudes regarding COVID-19 were older age, having higher education, being employed, having a joint family, having a higher monthly family income, and implementing more frequent practices. Furthermore, women were significantly more likely to adopt preventive activities than men, a finding that may be of critical importance since targeting women during household dissemination of education and preventive guidelines may ultimately yield improved implementation in households. Accordingly, we found that the sociodemographic factors associated with more frequent practice measures were being female, older age, having higher education, higher income, urban area residence, and having more positive attitudes. Male gender, occupation of

"students," COVID-19 knowledge score, marital status, and residence were significantly associated factors (Ferdous et al., 2020).

**Knowledge and Mitigation Practices**

According to the study of Erfani et al. (2020), the higher knowledge score regarding COVID-19 was significantly associated with a higher likelihood of having a positive attitude and good practice at the time of the COVID-19 pandemic. These results show the significance of improving the general population's knowledge regarding COVID-19 by health education programs which, in turn, would enhance their attitude and practice regarding COVID-19. Moreover, according to the study of Gao et al. (2020), in mastering the basic knowledge on COVID-19 prevention and control, the ultimate goal is the application in practice, i.e., to be able to properly take protective measures, control the roots of infection, cut off the transmission route, and protect vulnerable groups. Multiple linear regression analysis results showed that knowledge, attitude, occupation, education level, and place of residence were the main factors affecting the public's protective behavior.

**Attitude and Mitigation Practices**

Behavior is typically defined as the overt act of an individual and is generally assumed to stem from attitudes partly. One of the earliest studies looking at the association between attitudes and behavior was conducted by LaPiere in 1934. The association between attitudes and behaviors depends on the level of generality of the two. Specific attitudes predict specific behaviors, and broad attitudes predict broad behavior patterns (Albaraccin & Chan, 2018).

In the present study, participants showed extremely positive attitudes towards COVID-19. A total of (99.7%) of the public paid close attention to the development of the epidemic situation, (98.0%) thought they played an important role in controlling the epidemic, (94.7%) believed that the outbreak would soon be contained, and (99.7%) expressed willingness to cooperate with the relevant departments to take prevention and control measures. The results are similar to those of other published studies, likely because the Chinese government at different levels has attached great importance to the epidemic and adopted strict prevention and control measures in a timely manner against the disease after the outbreak. In addition, with the COVID-19 pandemic and media reports, the Chinese public understands the epidemic's severity. Therefore, they desire to participate actively in epidemic prevention and control. Furthermore, (97.5%) of the public expressed fear of infection for themselves and their families, indicating that health authorities should continue to organize corresponding health education and publicity to prevent fear of spreading (Gao et al., 2020). Lastly, according to Jang et al. (2021), trust in the quarantine system has an effect on personal preventive practices against COVID-19.

All of the information stated above regarding the variables of this study had helped the researcher to grasp the gist of the topics of interest comprehensively. Through correlations between these variables, the researcher was able to establish a relationship; thus, making the concrete and clear direction of the study and hopeful for the benefit that it will contribute to society.

## Theoretical Framework

This study was anchored on the theory, namely: Theory of Planned Behavior by Ajzen and Fishbein (1980) and Attitude Theory by Katz (1950).

The Theory of Planned Behavior highlights the relationship of one's knowledge and attitude to his/her practices. According to this theory, an individual's intention to perform a behavior can be predicted by determining their attitude toward the behavior, their beliefs regarding motivation to comply with others' expectations (subjective norms), and their beliefs regarding the perceived level of control over factors that may facilitate or hinder their performance of the behavior (perceived behavioral control). This means that attitude, beliefs, and behavior are interrelated since one's attitude, and belief may reflect a person's behavior.

Further, this construct of perceived behavioral control (PBC) can directly influence behavior, bypassing behavior intention. The control factors of the PBC construct can be either internal or external, with some authors arguing the presence of two distinct constructs or sub-constructs; self-efficacy (perceived difficulty); and controllability (perceived control). Some see these sub-constructs to reflect beliefs about both internal and external factors, while others suggest that self-efficacy reflects internal factors and controllability reflects external factors. While the effects of these two PBC sub-constructs have differed across studies, self-efficacy does appear to be a significant positive predictor of behavioral intention (Knowles et al., 2015).

Furthermore, Attitude Theory applies to this study for it highlights the relationship of one's attitude to his/her practices. According to this theory, behavioral choices are dependent on the association of a person's goals, attitudes, and perceived abilities with the perceptions and opinions of other people with whom he or she is connected. The contextualization of behavior offered by attitude theory is thus sociopsychological in character. In this theory, an attitude is defined as a subjective evaluation of behavior, which disposes of a person's behavior in a certain way towards it (Dijst et al., 2008).

**Conceptual Framework**

Figure 1 presents the conceptual framework of this study. It shows the independent variables, namely: the sociodemographic profile, knowledge, and attitude while the dependent variable is the mitigation practices. The domains for **sociodemographic profile** include sex, age, ethnicity, marital status, educational level, and occupation while the domains under **knowledge** are clinical presentations of COVID-19 and severity of COVID**-**19. On the one hand, the domains under **attitude** are measures adopted for COVID-19 prevention and confidence in winning the battle against COVID-19. On the other hand, the domains under **mitigation practices** are avoidance behavior and personal habits practice.

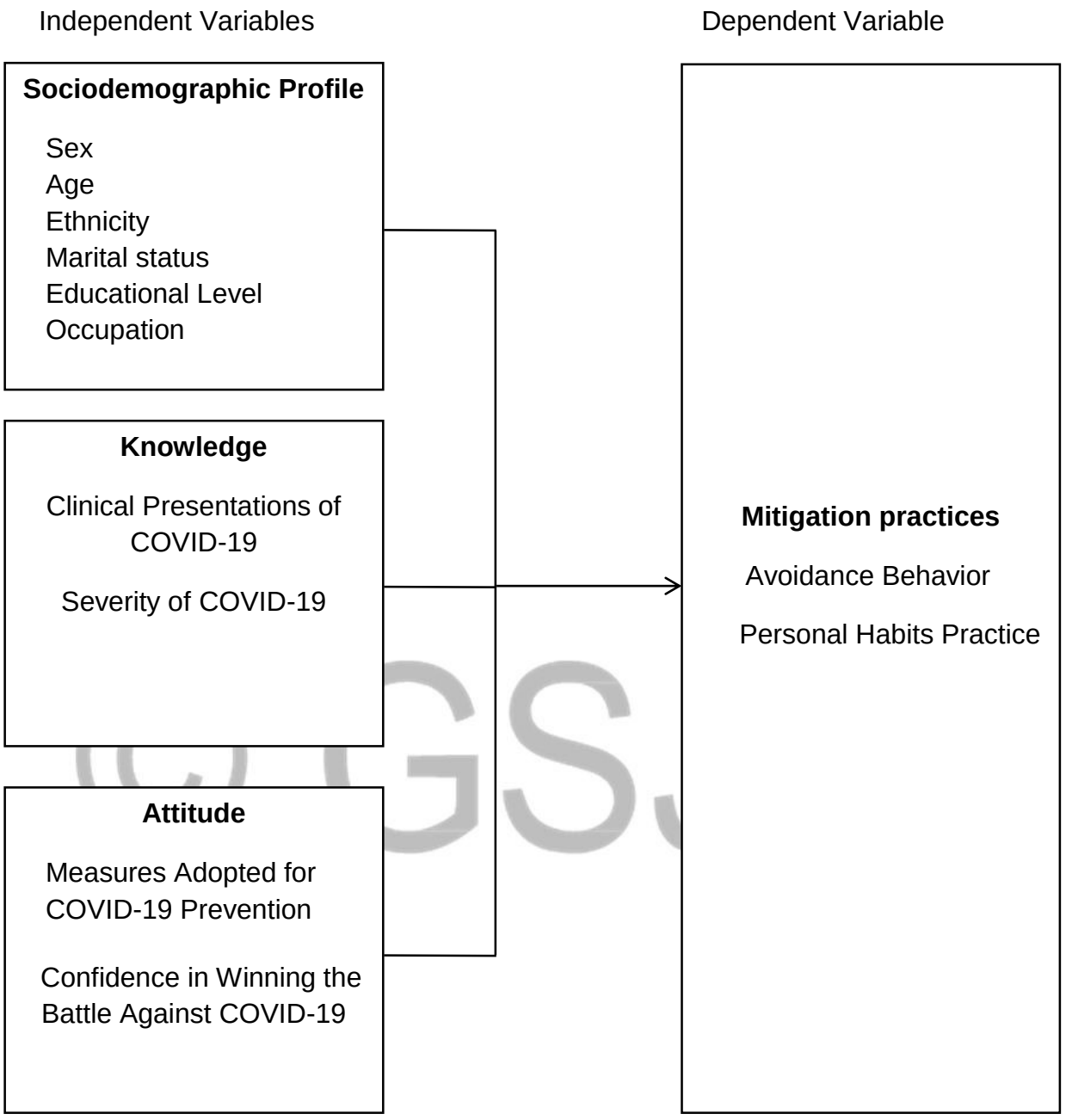


**Figure 1.** Conceptual Framework of the Study

In this study **sociodemographic profile** refers to the characteristic of a population, **knowledge** refers to the respondent's understanding of any given topic –COVID-19 infection. Likewise, an **attitude** refers to the respondent's feelings towards this subject and any preconceived ideas that they may have towards it. Adding on, **Coronavirus disease (COVID-19)** is a type of illness caused by a virus that can be transmitted from one person to another while **mitigation practices** are the reducing risk of loss from the occurrence of any undesirable event. **Sex** is either of the two major forms of individuals that occur in many species and are distinguished respectively as female or male, especially based on their reproductive organs and structures while **ethnicity** is a particular ethnic affiliation or group. Further, **age** pertains to growing old or having attained a specified age while **marital status** is the state of being married or not married — used on official forms to ask if a person is married, single, divorced, or widowed. Furthermore, **educational level** is the action or process of educating or being educated; a position in a scale or rank (as of achievement, significance, or value). Lastly, **occupation** refers to the job or profession of the respondents of this study.

# CHAPTER 2

## METHODOLOGY

This chapter presents the methods utilized in the study. It discusses the research design, research locale, research respondents, research instrument, data gathering procedure, statistical tools, and ethical considerations of this research study.

### Research Design

Quantitative research specifically the descriptive correlational design was utilized in this study. Quantitative research deals with quantifying and analyzing variables to get results. It involves utilizing and analyzing numerical data using specific statistical techniques to answer questions like who, how much, what, where, when, how many, and how (Apuke, 2017). Further, Quantitative research is defined as a systematic investigation of phenomena by gathering quantifiable data and performing statistical, mathematical, or computational techniques (Creswell, 2013). Moreover, it is an approach for testing objective theories by examining relationships among variables using statistical procedures. These variables, in turn, can be measured, typically on instruments, so that numbered data can be analyzed.

Furthermore, descriptive correlational research design describes a phenomenon and its characteristics. According to Nassaji (2015), it is more concerned with what rather than how or why something has happened. Therefore, observation and survey tools are often used to gather data. Furthermore, the statistical procedure is used to measure and describe the relationship or

association between two variables. The researcher may not know whether the variables are related or suspect that one influences the other. (Sabo, 2015)

From the description above, it can be concluded that quantitative descriptive correlational research design was appropriate for this study since the researcher is interested to know if the sociodemographic profile, knowledge and attitude have a significant influence on the mitigation practices of the respondents of this study.

**Research Locale**

This study was conducted in Barangay Matina Crossing, Davao City, which is situated at approximately 7.0594, 125.5864, on the island of Mindanao in Region XI, Philippines. Elevation at these coordinates is estimated at 9.0 meters or 29.5 feet above mean sea level. Its population as determined by the 2015 Census is 32,436. This represented 1.99 percent of the total population of Davao City. The population of Matina Crossing fell from 36,637 in 1990 to 32,436 in 2015, a decrease of 4,201 people. The latest census figures in 2015 denote a negative growth rate of 0.98 percent, or a decrease of 1,730 people, from the previous population of 34,166 in 2010. According to the 2015 Census, the age group with the highest population in Matina Crossing is *20 to 24*, with 3,295 individuals. Conversely, the age group with the lowest population is *80 and* above, with 347 individuals. Combining age groups, those aged *14 and below*, consisting of the young dependent population like infants/babies, children, and young adolescents/teenagers, make up an aggregate of 26.01 percent (8,435). Those aged *15 up to 64*, the economically active population and actual or potential members of the workforce, constitute a total of 68.03% (22,066). Finally, for those

aged 65 and over, the aging dependent population consisting of senior citizens, *has reached a* total 5.97 percent (1,935) in all (PhilAtlas, 2021).

The researcher chose Barangay Matina Crossing, Davao City as the locale of the study because as of March 24, 2021, this Barangay has been recorded to have the highest number of active cases infected with COVID-19 among all of the Barangays in Davao City, Philippines (DCDRRMO, 2021) thus, factors like sociodemographic profile, knowledge and attitudes have been explored as possible influences to the mitigation practices of the residents to control COVID-19 infection.


https://www.nationsonline.org


https://www.advocatesomi.com

**Figure 2**. Maps of the Philippines and Region XI

**Research Respondents**

The respondents of the study were the 395 residents of Barangay Matina Crossing, Davao City. The population in this Barangay is 32, 436. The number of residents on the said barangay who are ≥18 years old is 24, 001, while the number of residents unable to understand and fill in the questionnaire due to illnesses or other reasons is 295. Thus, the sample population using the inclusion-exclusion criteria is 23, 706. Using the Slovin's Formula, in 95% confidence limit with a 5% margin of error, the sample size is 395.

Consequently, stratified random sampling was used to select the study participants from the given sample size. First, the sample size was divided into 56 strata, based on the different puroks where they are being located (Moradzadeh et al., 2020). Stratified random sampling is a sampling method whereby the population is divided into subgroups. Stratification of target populations is extremely common in survey sampling. The strata must be mutually exclusive and exhaustive, and there is an assumption of homogeneity (Frey 2018). The respondents were selected via purposive sampling, obtaining seven respondents per stratum (Moradzadeh et al., 2020). The purposive sampling technique, also called judgment sampling, was the deliberate choice of the researcher due to the qualities the respondent possesses. It was a nonrandom technique that does not need underlying theories or a set number of participants. Simply put, the researcher decided what needs to be known and set out to find people who can and were willing to provide the information by knowledge or experience (Etikan et al., 2016).

Only residents of Barangay Matina Crossing, Davao City, who are ≥18 years old were included in the study since, at this stage, they accumulate a growing reservoir of previous experience that serves as a rich resource for learning (Bastable & Dart, 2007). Moreover, those unable to understand and fill in the questionnaire due to illnesses or other reasons were excluded (Gao et al., 2020).

**Research Instrument**

The survey questionnaire consists of four categories: the sociodemographic profile, knowledge, attitudes, and mitigation practices for COVID-19.

The first category is the sociodemographic profile of the respondents, which includes: sex, age, ethnicity, marital status, education level, and occupation.

The second category is for knowledge. There are six items in the knowledge section, and each item contained three options, namely, "yes," "no," and "don't know"; 1 point is given for a correct answer, and 0 points for an incorrect answer or a "don't know" response. The higher scores are correlated with more knowledge.



**Description and Interpretation of Questionnaires**

| Range of Means | Description | Interpretation |
|---|---|---|
| 0.8 - 1.0 | Very High | Respondents' knowledge is always manifested |
| 0.6 - 0.79 | High | Respondents' knowledge is oftentimes manifested |
| 0.4 – 0.59 | Moderate | Respondents' knowledge is sometimes manifested |
| 0.2 – 0.39 | Low | Respondents' knowledge is seldom manifested |
| 0 – 0.19 | Very Low | Respondents' knowledge is never manifested |

The third category is for the attitude section, which includes three items. A Likert scale was used to assess the level of agreement with the statements. Response options ranged from 1 (strongly disagree) to 5 (strongly agree). The higher scores indicate a more positive attitude.

**Description and Interpretation of Questionnaires**

| Range of Means | Description | Interpretation |
|---|---|---|
| 4.20 – 5.00 | Very High | Respondents' positive attitude is always manifested |
| 3.40 – 4.19 | High | Respondents' positive attitude is oftentimes manifested |
| 2.60 – 3.39 | Moderate | Respondents' positive attitude is sometimes manifested |
| 1.80 – 2.59 | Low | Respondents' positive attitude is seldom manifested |
| 1.00 – 1.79 | Very Low | Respondents' positive attitude is never manifested |



The fourth category is for the mitigation practices section, which includes eight items. A Likert scale was used to assess the level of agreement with the statements. The response options range from 1 (never) to 4 (always). The higher scores correlating with better protective actions were taken.

**Description and Interpretation of Questionnaires**

| Range of Means | Description | Interpretation |
|---|---|---|
| 3.26 – 4.00 | Very High | Respondents' mitigation practices are always evident |
| 2.51 – 3.25 | High | Respondents' mitigation practices are oftentimes evident |

| | | |
|---|---|---|
| 1.76 – 2.50 | Low | Respondents' mitigation practices are seldom evident |
| 1.00 – 1.75 | Very Low | Respondents' mitigation practices are never evident |

This survey questionnaire was adapted from the study of Sanaa Al ahdab (2021) titled, "A cross-sectional survey of knowledge, attitude, and practice (KAP) towards COVID-19 pandemic among the Syrian residents". The survey questionnaire underwent validation analysis by three research experts. This is to ensure the accuracy of the survey questionnaire.

After the validation, their documented verdict was analyzed by the Statistician. The researcher submitted a letter addressed to the Barangay Captain through the Head of the COVID task force of Barangay Matina Crossing. After their approval, the researcher disseminated a letter to the Purok Leaders of the said Barangay regarding the study, attaching the approval notice from the Barangay Hall. The content of the letter focuses on the Pilot study to be conducted and the survey proper. The researcher conducted a pilot testing including 30 respondents to evaluate the internal consistency reliability (Cronbach's α) to be accomplished by the Statistician (Gao et al., 2020).

**Data Gathering Procedure**

In facilitating the gathering of the needed data, the following procedures were undertaken. The researcher first sought the approval of the Dean of the Graduate School of the University of the Immaculate Conception (UIC) to conduct the study and gather data. Also, the researcher secured ethical clearance from the UIC-Research Ethics Committee (UIC REC) before data gathering commenced

using the validated instruments. The researcher highlighted the request for face-to-face interaction with the government officials as well as the respondents of Barangay Matina Crossing, Davao City, for the conduct of the study.

Further, the researcher secured a medical certificate reflecting that the researcher is in good condition and fit to conduct the study. The researcher also accomplished a complete dose of COVID-19 vaccination to establish immunity against the virus. Furthermore, the researcher secured a certificate from the Barangay where he resides to prove that he is neither a Person under Monitoring (PUM) nor a Person under Investigation (PUI). The researcher fully abided by the rules set by the IATF and followed the minimum health standards during the face-to-face data collection, like using of face mask and face shield (both researcher and respondents); washing of hands/applying hand sanitizer (both researcher and respondents); observing physical distancing (minimum of six feet apart) between the researcher and the respondents; not borrowing of personal things necessary for data collection (example: pen and the like); and, entertaining one respondent at a time to avoid aggregation of people. These pertinent documents and the observance of health protocols were all indicators that the researcher and the respondents are safe and in good condition during data gathering procedures.

The reasons why the researcher conducted a face-to-face distribution of survey questionnaires are: first, according to the study of Gao et al. (2020), there is a variable composition of samples due to the conduct of the online survey, which makes the females participate more than males as well as the medical staffs, who have a high education level, and young people. Therefore, the generalizability of

the research results has certain limitations; second, according to the study of Banik et al. (2021), there is a possibility of bias as underprivileged populations may not have been able to participate in the study, thereby restricted to only those with internet access, and consequently unlikely to represent an accurate sample of the whole Bangladeshi young adults; Lastly, according to Tomar et al. (2021), possible selection bias will prevail due to limited participants with access to the internet, which can be reached which excludes vulnerable population, hence, call for thorough research targeting a population with low education and economic background. Further, according to Inter-Agency Task Force, "Omnibus Guidelines of the Implementation of Community Quarantine in the Philippines," face-to-face interaction with another person is allowed, just make sure that the minimum public health standards shall be complied with all times for the duration of Enhanced Community Quarantine (ECQ), Modified Enhanced Community Quarantine (MECQ), General Community Quarantine (GCQ), Modified General Community Quarantine (MGCQ).

After the approval, the researcher sent a letter addressed to the Barangay Captain of Barangay Matina Crossing, Davao City, through the Head of the COVID task force. Then, the researcher disseminated a letter to the Purok Leaders of the said Barangay regarding the researcher's study, attaching the approval notice from the Barangay Hall. Afterward, the researcher disseminated the Informed Consent to the respondents and discussed its content. When a particular respondent agrees to participate, the researcher gives the survey questionnaire informing them to answer with complete honesty. The respondents were given ample time

to complete the survey. Then, the results from the scale or the questionnaire were recorded by the researcher. The results of the scale were tallied with the help of a statistician.

**Statistical Tools**

The data were analyzed using various statistical tools.

The **Mean** is nothing but the average. It is computed by adding all the values in the data set divided by the number of observations in it (Manikandan, 2011). In this study, the researcher utilized the mean to get all the respondents' average rates in terms of their knowledge, attitude, and mitigation practices regarding COVID-19.

The **Standard Deviation** is a measurement designed to find the disparity between the calculated mean. It is one of the tools for measuring dispersion. A low standard deviation indicates that the data points tend to be close to the mean of the set, while a high standard deviation indicates that the data points are spread out over a broader range of values (Ayeni, 2014).

A **Multiple Regression Analysis** is a statistical technique for estimating the relationship among variables with reason and result relations. Regression models with one dependent variable and more than one independent variable are called multilinear regression (Uyanik & Guler, 2013). Through this statistical tool, the researcher was able to evaluate if the sociodemographic profile, knowledge, and attitude are predictors of mitigation practices among respondents.

## Ethical Considerations

The study followed guidelines for ethical consideration set by the UIC Research Committee.

**Social Value.** In this study, the respondents, who are the residents in Barangay Matina Crossing, Davao City, were given ideas about the importance of their knowledge and attitude regarding Coronavirus disease and their influence in daily practices. Their mitigation practices allow them to assess if they were at risk of obtaining the virus unto themselves and possibly, towards the people they have close contact with. The social value of this study was addressed by highlighting the role of knowledge and attitude in predicting the action of an individual. This provided the necessary impetus to propel the residents to engage in controlling the spread of the COVID-19. The Barangay Matina Crossing, Davao City, is considered the primary beneficiary of this study. However, other places may utilize the outcome of this study since we are equally experiencing the pandemic. The findings of this study will improve the mitigation practices of the residents for the stoppage of the disease transmission. Once the hardbound has been approved, the researcher will disseminate such output towards the heads of different Barangays in Davao City since this study applies to different places for its timely and relevant subject of interest. The heads from different Barangays can contact the researcher if they need clarifications and further explanations regarding the study's results.

**Informed Consent Form.** The researcher informed the participants in facilitating the rigor of the conduct of the study. The researcher prepared an

informed consent form following the standard format of the institution to adhere to the policy of the graduate school. The researcher informed the participants through writing a discussion of their vital roles in the study. This informed consent form was obtained voluntarily, knowingly, and intelligently. Research participants should act freely, understand the implications, and agree to participate. Moreover, the researcher ensured that the participants read and signed the Informed Consent Form before disseminating the survey questionnaires.

**Vulnerability of the Participant.** The participants of this study were not considered vulnerable by the researcher since they can withdraw at any time when they feel uncomfortable or emotionally affected by the contents of this study. Vulnerable participants are those who are relatively or incapable of deciding for themselves whether or not to participate in the study for reasons such as physical and mental disabilities, poverty or asymmetric power relations, and marginalization, among others, and who are at greater risk for some harms. The participants in this study were not, in any way, vulnerable as they are old and mature enough to decide for themselves whether or not to participate in the study. They voluntarily gave their consent to be involved in data collection upon recruitment. Furthermore, the teachers agreed on the nature of the study and the researcher.

**Risks, Benefits, and Safety.** The research was conducted upon knowing that there was an acceptable positive benefit-risk ratio. The need to protect the participants from significant harm is equally important. Hence, the participant's risks, benefits, and safety were secured. The Inter-Agency Task Force mandated,

"Omnibus Guidelines of the Implementation of Community Quarantine in the Philippines," face-to-face interaction with another person is allowed, just make sure that the minimum public health standards shall be complied with all times for the duration of Enhanced Community Quarantine (ECQ), Modified Enhanced Community Quarantine (MECQ), General Community Quarantine (GCQ), Modified General Community Quarantine (MGCQ). In this study, the researcher complied with a complete dose of vaccination, a certificate from his Barangay reflecting that he is neither a Person Under Investigation (PUI) nor Person Under Monitoring (PUM), and a medical certificate. These pertinent documents and the observance of health protocols, such as wearing face mask/shield, performing handwashing procedure/applying hand sanitizer regularly, no borrowing of personal things (e.g., pen, or any other materials involved in the study to avoid disease transmission), physical distancing (six feet apart), entertaining one respondent at a time, and other ways just to avoid direct contact of one person to another are all keys for the researcher and the respondents to be safe and in good condition before, during, and after the conduct of data gathering procedures.

**Privacy and Confidentiality of Information.** Data collection, analysis, and interpretation were treated with the utmost confidentiality in this study. The researcher made an extra effort in handling the confidentiality of the responses and the participants of the study. Responses were encoded, analyzed, and stored carefully to protect the participants' names and images, especially those who hold high positions and influence on the organization. The questionnaire and the data were kept secure by storing them electronically and are restricted from the access

of others. The researcher ensured formal permission from the respective study sites.

Furthermore, the anonymity of the source of data and de-identification of any personal information shared by the respondents was ensured. It was treated with utmost care and confidentiality. The researcher honestly and sincerely adhered to the Data Privacy Act of 2012.

**Justice.** The researcher was impartial in choosing the respondents of the study by giving the respondents what they truly deserved. The principle of justice required the researcher to be fair to the respondents. In this study, partiality in dealing with the participants was avoided, by treating all respondents equally. The inclusion criteria set in the respondent's section guarantee that all participants will be fully involved and contribute exhaustively to the study. Their time and effort will not be wasted. Also, the researcher in this study shared the knowledge and the benefits gained to the participants. Respondents were made aware of their responsibility to answer the questionnaire honestly and truthfully. Consequently, the researcher also assured them that their participation is treated with importance and priority since the results and findings may benefit them in the future. Lastly, to compensate for the time that the respondents spent during the data gathering stage, the researcher provided them with tokens of appreciation.

**Transparency.** Transparency is vital in the facilitation of the conduct of the study. In analyzing the data, the researcher made sure that the outcome of the study was conveyed in full scope and with accuracy. Since the study is quantitative, the data presented are reflected precisely from the statistical test

result, which will be given to the respondents. Moreover, soft copies of the findings were stored in CDs and made available to the participants upon their request. The participation in answering the survey questionnaire was informed on the objective of the study, methodology of data collection and its analysis, and likewise the outcome of its interpretation. In this sense, the methodology of the conduct of the study was well-thought-of by the researcher. Further, the researcher secured a list from the Barangay Health Office of the residents who are disqualified from participating in the study as mentioned in inclusion-exclusion criteria due to health disabilities. Furthermore, the researcher welcomed the participants' sentiments about their hesitations in participating in the study since the researcher respects the decision and rights of the qualified residents not to participate.

**Qualification of the Researcher.** The researcher identified himself as a research professional. Therefore, as a qualified individual, the researcher is credible to conduct a series of studies that would be beneficial for the community in general. Moreover, the proponent claims moral authority in the conduct of the study since he qualifies to facilitate the context of the study. There are three elements that a researcher should have, such as competency, careful design, and worthwhile expected outcomes; thus, the researcher is confident that the qualification and the presence of the vital elements are noted.

**Adequacy of Facilities.** The researcher ensured the availability and accessibility of the needed facilities in this study. Library and internet resources were made available for further readings and references to deepen and strengthen the analysis and interpretation of the gathered data. Other materials that are of

great help were also made accessible. The researcher's adviser made herself always available for consultations. Finally, the group of experts provided valuable feedback and suggestions. They were also asked and consulted to help the researcher not only in conducting the study but also in communicating the results.

**Community Involvement.** The researcher informed the respondents and their local government officials by writing a letter to Barangay Captain of Matina Crossing, Davao City, and Purok leaders of the said barangay and disseminating Informed Consent towards the respondents to seek necessary permission. The consent included the extent of time, the potential impact and outcomes of the research, and those involved. Moreover, the respondents were made aware that the results of this study may help them and their supervisors gain knowledge and awareness, which will help in policymaking and improving their engagement towards the pandemic caused by COVID-19.

# CHAPTER 3

# RESULTS AND DISCUSSION

This chapter deliberates the overall results of the study including the detailed analysis and interpretation; statistical tables were also presented as the basis of specific and overall results.

## Sociodemographic Profile of the Respondents

Table 1 presented the sociodemographic profile of the respondents. As shown in the table below, a total of 395 survey responses from 56 puroks in Brgy. Matina Crossing, Davao City were received. Among the final sample, 250 (63.3%) were females while 145 (36.7%) were males; 207 (52.45%) were less than 32 years old while 188 (47.6%) were greater than 32 years old; 186 (47.1%) were married while 209 (52.9%) were other types of marital status; 252 (63.8%) were Cebuano while 143 (36.2%) were other ethnicities; 114 (28.9%) were Junior high school and below while 281 (71.1%) were Senior high school and above; 36 (9.1%) were medical professionals while 359 (90.9%) were non-medical professionals.

These results are parallel with the study conducted by Gao et al. (2020) in China where there were 1,669 (78%) females while 467 (22%) were males; 207 (10%) were Junior high school and below while 1929 (90%) were Senior high school and above. Further, results are the same as the study conducted by Al ahdab (2021) in Syria where 503 (71.85%) were age less than 32 years old while 203 (28.25%) were age greater than 32 years old. The variability of the

composition of samples was due to the conduct of the online survey, which made the other subgroups to be higher in number than the other.

**Table 1**
**Sociodemographic Profile of the Respondents**

| Socio-demographic Profile | Frequency | Percent (%) |
|---|---|---|
| **Sex** | | |
| Male | 145 | (36.7) |
| Female | 250 | (63.3) |
| **Age** | | |
| less than 32 years old | 207 | (52.4) |
| greater than 32 years old | 188 | (47.6) |
| **Marital Status** | | |
| Married | 186 | (47.1) |
| Others | 209 | (52.9) |
| **Ethnicity** | | |
| Cebuano | 252 | (63.8) |
| Others | 143 | (36.2) |
| **Educational Attainment** | | |
| Junior high school and below | 114 | (28.9) |
| Senior high school and above | 281 | (71.1) |
| **Occupation** | | |
| Medical professional | 36 | (9.1) |
| Non-medical professional | 359 | (90.9) |

**N=395**

Furthermore, results for marital status and occupation are aligned with the data from PhilAtlas (2020) showing a high number of single-status individuals in Davao City compared to married ones and only a few residents working in the medical field. Moreover, result on ethnicity was expected since the Philippine Statistic Authority presented that Cebuano is the dominant ethnic group (33.2%) in Davao City.

**Level of Knowledge regarding COVID-19**

Table 2 presented the level of knowledge regarding COVID-19 which has an overall mean of 0.88 described as very high. It means that the respondents' knowledge is always manifested. In addition, the overall standard deviation is 0.33 and is less than the value of the overall mean, which denotes that there is a statistical significance of the standard deviation value. This study's finding indicates that residents in Barangay Matina Crossing, Davao City have a thorough knowledge of COVID-19, its clinical manifestations, and the severity of the disease it can cause. Also with this very high level of knowledge, it shows that the residents are vigilant unto the severity of COVID-19 infection once the signs and symptoms manifested unto the people around them. This also implies that the City Government Unit of Davao is successful in establishing programs that could educate the respondents regarding necessary information about COVID-19.

The finding of the study is in congruence with the results of Gao et al. (2020) conducted in China where the Chinese governmental offices at all levels have released relevant educational materials promptly and have delivered COVID-19-related content through various channels, including television, the internet, and

publicity boards, since the outbreak began leading to the good knowledge of COVID-19 of the people of China, with an overall correct response rate of 91.2 percent. However, this finding is in contrary with the study made in Syria by Al ahdab (2021) where it obtained only a moderate knowledge score.

**Table 2**
**Level of Knowledge Regarding COVID-19**

| | Mean | SD | Description |
|---|---|---|---|
| **Clinical Presentations of COVID-19** | | | |
| 1. Knowing that the main clinical symptoms of COVID-19 are fever, fatigue, dry cough, and muscle pain | 0.93 | 0.26 | Very High |
| 2. Knowing that the symptoms of COVID-19 are similar to the common symptoms of Flu | 0.91 | 0.29 | Very High |
| 3. Knowing that persons with COVID-19 can transmit the virus to others when a fever is not present | 0.87 | 0.33 | Very High |
| **Category Mean** | **0.90** | **0.29** | **Very High** |
| **Severity of COVID-19** | | | |
| 4. Knowing that COVID-19 infection can cause severe symptoms in all patients | 0.82 | 0.38 | Very High |
| 5. Knowing that COVID-19 infection can cause serious disease | 0.88 | 0.33 | Very High |
| 6. Knowing that although there is no proven cure for COVID-19, the available treatments lead to recovery | 0.84 | 0.37 | Very High |
| **Category Mean** | **0.85** | **0.36** | **Very High** |
| **Overall Mean** | **0.88** | **0.33** | **Very High** |

Good to note that the survey was conducted during the very early stages of COVID-19 in Syria when the country was not seriously affected by the COVID-19 outbreak. This underlines the importance of the health authorities providing consistent clear updates and information about the emerging virus as well as the need to continuously assess whether their messages were being understood within the community.

**Clinical Presentations of COVID-19**. This domain has a category mean of 0.90 described as very high which means respondents' knowledge is always manifested. This result implied that the residents demonstrated knowledge about COVID-19 specifically on the signs and symptoms manifested by the person once infected. In this way, they could make an immediate response on how to handle the patient and to render proper medical care to avoid disease transmission towards other people.



This finding is in contrast with the study of Al ahdab (2021) which shows that the moderate knowledge score specifically in the domain, clinical presentations of COVID-19, was probably because Syrian residents have not experienced previous pandemics such as H1N1 or SARS.

**Severity of COVID-19.** This domain has a category mean of 0.85 described as very high which means respondents' knowledge is always manifested. This result implies that the residents demonstrated knowledge about COVID-19 specifically the severity of the infection caused by the virus. This is necessary for the residents to be informed that COVID-19 infection should not be underestimated, for it might affect the person's way of living due to the

inconvenience that it will cause, and in the worst case, it may lead to death if the patient is not properly managed.

This finding is contrary to the study of Zhang et al. (2021) which revealed that there were recorded critical cases of severe complications due to COVID-19 in different countries and the result is tantamount to the low knowledge of the respondents regarding the severe effects of the virus. Also, since knowledge regarding the virus will allow people to consider it, thus the health concern will be addressed as soon as possible.

**Level of Attitude regarding COVID-19**

Table 3 presented the level of attitude regarding COVID-19 which has an overall mean of 4.07 described as high. It means that the respondents' positive attitude is oftentimes manifested. In addition, the overall standard deviation is 0.80 which is lower than the mean value, denoting the statistical significance of the standard deviation value. The finding of the study indicates that residents in Barangay Matina Crossing, Davao City have a positive attitude toward COVID-19 as regards the measures adopted for its prevention and confidence in winning the battle against the virus. Also with this high level of positive attitude, the residents are reminded about the ill-effect of COVID-19 since they manifest a good attitude, thus limiting the disease transmission in the community. This also implies that the government officials of Davao City are working well in finding ways to lessen the disease transmission by implementing rules and regulations on COVID-19.

The finding of the study agrees with the results of Gao et al. (2020), where the participants of the study showed extremely positive attitudes towards COVID-19.

According to the result, participants paid close attention to the development of the pandemic, thought they played an important role in controlling the epidemic, believed that the outbreak would soon be contained, and expressed willingness to cooperate with the relevant departments to take prevention and control measures.

**Table 3**
**Level of Attitude regarding COVID-19**

| | Mean | SD | Description |
|---|---|---|---|
| **Measures Adopted for COVID-19 Prevention** | | | |
| 1. Closing the schools is an effective way of preventing the spread of the disease | 4.46 | 0.90 | Very High |
| 2. Implementing curfew is an effective way of preventing the spread of the disease | 4.39 | 0.94 | Very High |
| **Category Mean** | **4.43** | **0.81** | **Very High** |
| **Confidence in Winning the Battle Against COVID-19** | | | |
| 3. Believes that COVID-19 will spread widely in Davao City | 3.37 | 1.40 | Moderate |
| **Category Mean** | **3.37** | **1.40** | **Moderate** |
| **Overall Mean** | **4.07** | **0.80** | **High** |



Similarly, a study made in Syria by Al ahdab (2021) presented that their government has also closed schools and enforced curfew while allowing some essential businesses to open. The vast majority of Syrians included in the survey believed that these measures were effective against COVID-19.

**Measures Adopted for COVID-19 Prevention.** This domain has a category mean of 4.43 described as very high which means the respondents'

positive attitude is always manifested. This result implied that the residents demonstrated positive attitude about COVID-19 which reflected in their understanding that school closure and implementing curfew will be a great help to mitigate disease transmission in the community.

This finding supports the study of Gao et al. (2020) where the participants showed an extremely positive attitude towards measures adopted for COVID-19 prevention. According to the study, the Chinese government at different levels has attached great importance to the epidemic and adopted strict prevention and control measures on time against the disease after the outbreak. Further, with the COVID-19 pandemic and media reports, the public understood the severity of the epidemic. Therefore, they desired to actively participate in epidemic prevention and control

**Confidence in Winning the Battle Against COVID-19.** This domain has a category mean of 3.37 described as moderate which means the respondents' positive attitude is sometimes manifested. This result implied that the residents demonstrated a positive attitude, however in a moderate manner. Most of the respondents believed that COVID-19 infection will spread widely in Davao City. This was due to their understanding of the nature of the disease transmission, the leniency facilitation of quarantine constraints, and some people do not follow the required minimum health standards. This finding aligns with the study of Al ahdab (2021) where 15.4 percent of participants believed that the virus would spread in Syria and only 60 percent had confidence that COVID-19 will eventually be successfully controlled. This result shows the fact that the COVID-19 is still rising

despite the implementation of guidelines for the people to follow to avoid further disease transmission.

**Level of Mitigation Practices regarding COVID-19**

Table 4 presented the level of mitigation practices regarding COVID-19 which has an overall mean of 3.66 described as very high. It means that the respondents' mitigation practices are always evident. In addition, the overall standard deviation was 0.38 which is lower than the mean value, thus denoting the statistical significance of the standard deviation value. This study's finding indicates that residents in Barangay Matina Crossing, Davao City have performed mitigation practices on COVID-19, specifically on how it is being avoided and highlight personal habits practice. Through this very high level of mitigation practices, the residents can protect themselves since they executed personal actions that would mitigate the disease transmission. This also implies that the City Government Unit of Davao has been consistent on the protocol that they set and information that they disseminated for these residents to establish their practices that will mitigate disease transmission.

This result is parallel with the study of Zhong et al. (2020) in China where the respondents have an appropriate practice towards COVID-19. According to the study, the majority of the respondents wore facemask and face shield due to the availability of a quality facemask and face shield at a lower price compared during the early stages of infection where it reached its price surge by 6 to 10 folds. It could also be the result of the residents' good knowledge regarding the high infectivity of the COVID-19 virus, which can be easily transmitted between people

via invisible respiratory droplets. Further, respondents cannot avoid traveling via taxi since it can help them reach their target destination on time and with convenience. Furthermore, the residents might have considered that cellophane barriers installed on taxis would provide them extra protection from the transmission of the COVID-19 while on transit.

**Avoidance Behavior.** This domain has a category mean of 3.46 described as very high which means that the respondents' mitigation practices are always evident.

**Table 4**
**Level of Mitigation Practices regarding COVID-19**

| | Mean | SD | Description |
|---|---|---|---|
| **Avoidance Behavior** | | | |
| 1. Avoiding crowded places | 3.74 | 0.62 | Very High |
| 2. Avoiding travel by taxi | 2.97 | 1.01 | High |
| 3. Avoiding shaking hands | 3.67 | 0.80 | Very High |
| **Category Mean** | **3.46** | **0.62** | **Very High** |
| **Personal Habits Practice** | | | |
| 4. Practicing better hygiene than before | 3.86 | 0.47 | Very High |
| 5. Using disinfectants (ex. Ethanol) | 3.85 | 0.47 | Very High |
| 6. Wearing facemask and face shield | 3.88 | 0.40 | Very High |
| 7. Washing hands | 3.88 | 0.42 | Very High |
| 8. Having a balance diet | 3.43 | 0.86 | Very High |
| **Category Mean** | **3.78** | **0.36** | **Very High** |
| **Overall Mean** | **3.66** | **0.38** | **Very High** |

This result implied that the residents have the freedom to execute what is right about mitigating disease transmission since they already knew what were the things that they have to avoid for them to be protected.

The result of the study supports the findings of Al ahdab (2021) where the Syrian respondents are cautious about the mitigation practices. According to the study, 92.5 percent of the respondents avoided crowded places and shaking hands. These findings are useful for public health policy-makers and health workers to identify and target people for COVID-19 prevention and health education in case of future outbreaks.

**Personal Habits Practice.** This domain has a category mean of 3.78 described as very high which means that the respondent's mitigation practices were always evident. This result implied that the residents develop their routine acts to avoid COVID-19 infection.

This finding agrees with the study of Al ahdab (2021) where the Syrian respondents are cautious about the mitigation practices and 90.8 percent practiced better hygiene than before the quarantine, like washing hands and using disinfectants. Surprisingly, however, only 27.9 percent wore facemasks when leaving homes. This study presented a unique reference for pandemic cautious behavioral response to COVID-19 in a post-conflict context.

**Significance of the influence of Sociodemographic profile, Knowledge, and Attitude of the respondents to COVID-19 Mitigation Practices**

Table 5 showed the influence of sociodemographic profile, knowledge, and attitude on the COVID-19 mitigation practices of the respondents using multivariate

linear regression analysis. It showed that sex, age, marital status, ethnicity, educational attainment, and occupation does not significantly influence the level of COVID-19 mitigation practices of the respondents with p-values greater than 0.05 which is higher than the alpha set at 0.05. Notably, the knowledge mean score significantly influenced COVID-19 mitigation practices of the respondents (B=0.06, p=0.001). This means that for every point increase in knowledge mean score, COVID-19 Mitigation practices increases by 0.06. Similarly, Attitude also positively influence COVID-19 mitigation practices (B=0.093, p=0.001). This means that for every point increase in attitude, COVID-19 practices increase by 0.093.

These results are contrary to the findings of Erfani et al. (2020) in Iran. According to the study, the documented practices associated with younger age males are poor. In addition, a study made in China by Gao et al. (2020) showed that age was a factor influencing the public's grasp of COVID-19. Also, another factor is marital status showing that married people have the responsibility of caring for their families in addition to self-protection. Likewise, Medical personnel had more knowledge, better attitudes, and higher behavior scores than nonmedical respondents because medical personnel generally have a college degree or higher and have received more professional medical training.

In addition, multiple linear regression analysis results showed that knowledge and attitude were the main factors affecting the public's protective behavior. According to the KAP model in the study made by Gao et al. (2020), knowledge was the basis and attitude was the driving force of behavior change.

**Table 5**
**Significance of the influence of Sociodemographic Profile, Knowledge, and Attitude of the respondents to COVID-19 Mitigation Practices**

| | B | SE | *p* | Remarks |
|---|---|---|---|---|
| **Knowledge Mean Score** | 0.06 | 0.014 | 0.001 | Significant |
| **Attitude** | 0.093 | 0.023 | 0.001 | Significant |
| **Sex** | 0.019 | 0.038 | 0.62 | Not significant |
| **Age** | -0.017 | 0.038 | 0.66 | Not significant |
| **Marital Status** | 0.038 | 0.038 | 0.31 | Not significant |
| **Ethnicity** | -0.057 | 0.039 | 0.14 | Not significant |
| **Educational Attainment** | 0.007 | 0.041 | 0.86 | Not significant |
| **Occupation** | 0.069 | 0.064 | 0.28 | Not significant |

. Therefore, improving people's knowledge and fostering positive attitudes towards epidemic prevention were indispensable for improving protective behavior to fight against the COVID-19 pandemic. These results can be used by health policymakers to develop more targeted policies to fight against the COVID-19 pandemic.

**Sociodemographic Profile and Mitigation practices.** This domain has a p-values greater than 0.05 which was higher than the alpha set at 0.05 described as not significant which means it does not influence the mitigation practices of the residents in Barangay Matina Crossing, Davao City. This implied that regardless of what sociodemographic profile a respondent has, it did not predict the mitigation practices on COVID-19.

This finding is in contrast with the study made by Gao et al. (2020) where the population younger than 32 years old (the median age of the study subjects) had less knowledge than their counterparts, which was potentially, attributed to the increases in social experience and knowledge reserves with age. Marital status,

education, occupation, and place of residence all had impacts on Knowledge, Attitude, and Practices.

**Knowledge and Mitigation Practices**. This domain has a result value of (B=0.06, p=0.001) described as significant which means it influenced the mitigation practices of the residents in Barangay Matina Crossing, Davao City. This implied that the respondents' knowledge of COVID-19 impacts their mitigation practices.

This finding is in agreement with the study of Erfani et al. (2020) which revealed a significant influence between knowledge and mitigation practices since a higher knowledge score regarding COVID-19 was significantly associated with a higher likelihood of having a positive attitude and good practice at the time of the COVID-19 pandemic. These results showed the significance of improving the general population's knowledge regarding COVID-19 by health education programs which, in turn, would enhance their attitude and practice regarding COVID-19.

**Attitude and Mitigation Practices**. This domain has a result value of (B=0.093, p=0.001) described as significant which means it influenced the mitigation practices of the residents in Barangay Matina Crossing, Davao City. This implied that the respondents' attitude on COVID-19 impacts their mitigation practices.

This finding supports the study made by Albaraccin and Chan (2018). According to the study, the attitude has significantly influenced COVID-19 mitigation practice since the association between attitudes and behaviors depends

on the level of generality of the two. Specific attitudes predict specific behaviors, and broad attitudes predict broad behavior patterns.

# CHAPTER 4

# CONCLUSION AND RECOMMENDATIONS

This chapter deliberates the overall findings and the nutshell of this research. It also includes a set of recommendations that were anchored from the result of this study.

## Findings

From the gathered results, the following findings were made:

1. In terms of sociodemographic profile, the final sample covers 250 (63.3%) females while 145 (36.7%) were males; 207 (52.45%) were age less than 32 years old while 188 (47.6%) were age greater than 32 years old; 186 (47.1%) were married while 209 (52.9%) were other types of marital status; 252 (63.8%) were Cebuano while 143 (36.2%) were other ethnicities; 114 (28.9%) were Junior high school and below while 281 (71.1%) were Senior high school and above; 36 (9.1%) were medical professionals while 359 (90.9%) were non-medical professionals.
2. The level of knowledge regarding COVID-19 has an overall mean of 0.88 described as very high. It means that the respondents' knowledge was always manifested. In addition, the overall standard deviation is 0.33 which is less than the value of the overall mean, which denoted that there was a statistical significance of the standard deviation value. Also, in terms of clinical presentations as the domain in the level of knowledge regarding

COVID-19, it has a category mean of 0.90 described as very high which means that the respondents' knowledge was always manifested. Further, the severity of COVID-19 as the domain in the level of knowledge has a category mean of 0.85 described as very high which means respondents' knowledge is always manifested.

3. The level of attitude regarding COVID-19 has an overall mean of 4.07 described as high. It means that the respondents' positive attitude was oftentimes manifested. In addition, the overall standard deviation was 0.80 which is lower than the mean value, thus denoting statistical significance of the standard deviation value. Also, in terms of measures adopted for COVID-19 prevention as the domain in the level of attitude regarding CIOVID-19, has a category mean of 4.43 described as very high which means the respondents' positive attitude was always manifested. Further, the confidence in winning the battle against COVID-19 as the domain in the level of attitude has a category mean of 3.37 described as moderate which means the respondent's positive attitude was sometimes manifested.
4. The level of mitigation practices regarding COVID-19 has an overall mean of 3.66 described as very high. It means that the respondents' mitigation practices were always evident. In addition, the overall standard deviation was 0.38 which is lower than the mean value, thus denoting the statistical significance of the standard deviation value. Also, in terms of avoidance behavior as the domain in the level of mitigation practices regarding COVID-19, has a category mean of 3.46 described as very high which means that

the respondents' mitigation practices were always evident. Further, the personal habit practice as the domain in the level of mitigation practices regarding COVID-19, has a category mean of 3.78 described as very high which means that the respondent's mitigation practices were always evident.

5. Sex, age, marital status, ethnicity, educational attainment, and occupation of the residents to mitigation practices of COVID-19 has no significant relationship with p-values greater than 0.05 which was higher than the alpha set at 0.05. Notably, knowledge mean score significantly influenced COVID-19 mitigation practices of the respondents (B=0.06, p=0.001). Likewise, Attitude was also positively influence COVID-19 mitigation practices (B=0.093, p=0.001).



## Conclusions

Based on the findings of the study, the following conclusions were drawn:

1. In terms of sociodemographic profile there were more female respondents than male respondents. In terms of age group, the majority of respondents participated were age less than 32 years old compared to age greater than 32 years old. Further, the majority of the respondents were other types of marital status as compared to married status. Furthermore, majority of the respondents were Cebuano compared to other types of ethnicity. Notably, majority of the respondents have attained senior high school and above compared to junior high school and below. Also, majority of the respondents were non-medical professionals compared to medical professionals.

Hence, a large proportion of the respondents in this study were young individuals which were not yet married, having Cebuano as their type of ethnicity and are attained high degree in education which were non-medically inclined profession because these sociodemographic profile were dominant in Barangay Matina Crossing, Davao City and were willing to participate in the study.

2. The level of knowledge regarding COVID-19 was described as very high indicating that the respondent's knowledge was always manifested. Hence, the residents in Barangay Matina Crossing, Davao City have a thorough knowledge of COVID-19, its clinical manifestations and the severity of the disease it can cause. Also with this very high level of knowledge, the residents were vigilant unto the severity of COVID-19 infection once the signs and symptoms manifested unto the people around them. This also implied that the City Government Unit of Davao became successful in establishing programs that could educate the respondents regarding necessary information about COVID-19.
3. The level of attitude regarding COVID-19 was described as high, indicating that the respondent's positive attitude was oftentimes manifested. Hence, the residents in Barangay Matina Crossing, Davao City have a positive attitude toward COVID-19 in respect of measures adopted for its prevention and confidence in winning the battle against such virus. Also with this high level of positive attitude, the residents will be able to always be secured and protected against infection for they manifest a good point of view, thus

limiting the disease transmission in the community. This also implied that the Government Unit of Davao worked hard in evaluating ways for them to lessen disease transmission by implementing rules and regulations.

4. The level of mitigation practices regarding COVID-19 was described as very high, indicating that the respondent's mitigation practices were always evident. Hence, the residents in Barangay Matina Crossing, Davao City have performed mitigation practices on COVID-19, specifically on how it is being avoided and highlight personal habits practice. Through this very high level of mitigation practices, the residents are able to protect themselves since they execute personal actions that would mitigate the disease transmission. This also implied that the City Government Unit of Davao has been consistent on the protocol that they set and information that they disseminated for these residents to establish their practices that will mitigate disease transmission.
5. Lastly, in terms of the influence, it shows that sex, age, marital status, ethnicity, educational attainment, and occupation did not significantly influence the level of COVID-19 mitigation practices of the respondents. Notably, the knowledge mean score significantly influenced the COVID-19 mitigation practices of the respondents. This means that for every point increase in knowledge mean score, COVID-19 Mitigation practices increase. Similarly, Attitude also positively influenced COVID-19 mitigation practices. This means that for every point increase in attitude, COVID-19 practices increase.

## Recommendations

These were the recommendations for future directions of the study:

1. Since there was an over-representation of respondents with higher educational levels, that might inflate the overall results, the future researcher, with the help of the barangay officials in Brgy. Matina Crossing, Davao City may conduct an information drive regarding the said study towards the entire residents so that each resident can express full participation in the research study.
2. Since the level of knowledge regarding COVID-19 of the residents is already very high, the City Government Unit of Davao may continue to establish programs that could educate the respondents regarding necessary information about COVID-19.
3. Since the level of attitude regarding COVID-19 is high, it can still reach a very high level if the City Government Unit of Davao shall prioritize evaluating ways to be set as rules and regulations on the said place to lessen disease transmission.
4. Since the level of mitigation practices regarding COVID-19 is very high, the City Government Unit of Davao may continue to be consistent on the protocol that they set and information that they disseminate for these residents to establish their practices that will mitigate disease transmission.
5. Since there is no significant influence between sex, age, marital status, ethnicity, educational attainment, and occupation to mitigation practices, the City Government Unit of Davao may continue to intensify programs that will

improve their ways on how to mitigate disease transmission, regardless of what kind of sociodemographic profile a respondent has. Further, since knowledge and attitude significantly influence the mitigation practices, the City Government Unit of Davao shall continue to disseminate proper information about COVID-19 on time and establish protocols in the community to intensify their positive attitude, thus leading to reasonable actions to mitigate disease transmission, especially the COVID-19.

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