

**KNOWLEDGE, ATTITUDE, AND PRACTICES ON COVID-19 INFECTION
PREVENTION AND CONTROL MEASURES OF PARAMEDICAL
UNIVERSITY STUDENTS**

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MISAMIS UNIVERSITY

2023

**KNOWLEDGE, ATTITUDE, AND PRACTICES ON COVID-19 INFECTION
PREVENTION AND CONTROL MEASURES OF PARAMEDICAL
UNIVERSITY STUDENTS**

**An Undergraduate Thesis
Presented to the Faculty of the College of Nursing**

**In Partial Fulfillment of the
Requirements for the Degree
Bachelor of Science in Nursing**

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June 2023

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GLAIZA MAE H. YABO

We hereby declare that this research output is our original work, and it has been written by us in its entirety. We have duly acknowledged all the sources of information which have been used in this thesis.

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APPROVAL SHEET

“In partial fulfillment of the requirements for the degree of Bachelor of Science in Nursing, this research output entitled, “**Knowledge, Attitude, and Practices on COVID-19 Infection, Prevention, and Control Measures of Paramedical University Students**” is hereby recommended for acceptance and approval.

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ABSTRACT

Infection prevention and control (IPC) are procedures to prevent infection transmission of COVID-19 infection. This study aimed to determine the knowledge, attitude, and practices of paramedical university students' COVID-19 infection prevention and control measures. A quantitative, descriptive-correlational research design was used. A modified questionnaire was used to gather data on paramedical university students' levels of knowledge, attitude, and practice toward COVID-19 infection and prevention control measures. The study's respondents were 247 paramedical students in one of the higher education institutions in Ozamiz City. The data were analyzed using frequency and percentage, mean and standard deviation, ANOVA test, Pearson's R correlation coefficient, and regression analysis. Most paramedical students had a very high level of knowledge of COVID-19, as they understood the etiology, risk group, transmission, and prevention. They had a very positive attitude toward COVID-19 IPCs. They also had very good practices on COVID-19 IPCs. It was shown that there was a highly significant relationship between the respondents' level of knowledge and practices on COVID-19 IPCs in terms of transmission and prevention. It was also found that there was a highly significant relationship between the respondents' level of attitude and practices on COVID-19 IPCs in terms of barriers and self-motivation. The male fourth-year nursing students were the most vulnerable group of paramedical students during their limited face-to-face clinical exposure based on their levels of knowledge, attitudes, and practices towards COVID-19 infection prevention control measures.

Keywords: COVID-19, infection prevention and control, KAP, paramedical students, practices

ACKNOWLEDGMENT

The researchers would like to express our deepest gratitude and appreciation to the following individuals and organizations who have contributed to the successful completion of this research paper:

Firstly, the researchers give their deepest gratitude and heartfelt thanks to God for guiding them and allowing them to continue despite the obstacles that they have faced in the completion of this research paper.

The researchers are immensely grateful to their research adviser, Dr. Merasol O. Duyag, for her invaluable guidance, expertise, and constant support throughout this research endeavor. Her profound knowledge, critical insights, and constructive feedback have been instrumental in shaping the direction and quality of this study.

The researchers would also like to extend their heartfelt appreciation to the members of the research committee, Dr. Sammy B. Taghoy, Prof. Sheila Mae L. Manlegro, and Prof. Maricar M. Mutia, for their valuable inputs, constructive criticisms, and expert advice. Their collective wisdom and expertise have greatly enriched the quality of this research.

The researchers would like to express their gratitude to their peers and colleagues who have been a constant source of motivation, support, and intellectual discussions. Their constructive feedback, brainstorming sessions, and collaborative spirit have contributed significantly to the refinement of this research.

The researchers are indebted to their friends and family for their unwavering support, encouragement, and patience throughout this research journey. Their understanding and encouragement have provided the emotional strength necessary to persevere through the challenges encountered along the way.

Lastly, the researchers would like to acknowledge all the researchers, scholars, and authors whose work has formed the foundation of this study. Their pioneering contributions to the field have been instrumental in shaping our understanding and have served as a source of inspiration throughout the research process.

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Chapter I

INTRODUCTION

Rationale of the Study

Infection prevention and control (IPC) are evidence-based practices and standardized procedures which prevent and reduce the risks of infection transmission among health workers and patients (World Health Organization [WHO], n.d.-a). IPC encompasses hand hygiene, surgical site infections, injection safety, and hospital emergency protocols (WHO, n.d.-b). However, these procedures have been modified to prevent and control COVID-19 infection (European Centre for Disease Prevention and Control [ECDC], 2020; WHO, 2020). Procedures such as hand hygiene, proper personal protective equipment usage, respiratory hygiene, cough etiquette, proper disinfection, and safe injection practices are one of the procedures done to prevent COVID-19 transmission (Centers for Disease Control and Prevention [CDC], 2021c). Implementing public health protocols and IPCs has significantly reduced the number of COVID-19 cases worldwide (Hori et al., 2021; Ohta et al., 2021; WHO, 2020).

Paramedical students must be well-equipped in knowledge, skills, and attitude of their respective courses, for they will soon play a significant role in providing healthcare services during periods of great disease (CDC, 2021b). To avoid an outbreak among students due to face-to-face exposure, the Commission on Higher Education (CHED) released guidelines on procedures and protocols to observe upon retrofitting school environments for their return. For the paramedical students who are returning to the face-to-face environment for their limited clinical exposures in hospitals and laboratories,

knowing the knowledge, attitudes, and practices that they have towards COVID-19 and analyzing the KAP factors can be vital in the creation of countermeasures for these students in COVID-19 prevention (Fatah et al., 2021; Hatabu et al., 2020; Hori et al., 2021).

Surveys on KAP in other countries yielded results that respondents showed high knowledge about COVID-19, exhibited optimistic attitudes, and low-risk practices. These studies suggest a relation between higher levels of knowledge to the practice of precautionary health measures. In addition, attitudes toward COVID-19 are related to preventative behaviors (Fatah et al., 2021; Hatabu et al., 2020; Hori et al., 2021; Lee et al., 2021). To date, several surveys have investigated university students' knowledge of COVID-19 and factors influencing KAP in other countries. However, no known studies investigated the KAP of paramedical students due to clinical exposure in hospitals and laboratories in the Philippines specifically.

The purpose of this study was to evaluate the knowledge, attitude, and practices on the infection prevention and control of paramedical students during the Covid-19 pandemic. Additionally, this aimed to identify which group of paramedical university students were vulnerable during their clinical exposure in their assigned areas. The results of this study would be beneficial in gauging the strengths and areas in need of improvement among paramedical students and their significance to improving skills necessary to combat the COVID-19 infection during their clinical exposure in the hospital setting. The results of this study would also benefit the various paramedical college departments as the findings can be utilized to generate the evidence needed to provide support for improving COVID-19 infection prevention and control training to students of paramedical programs.

Theoretical Framework

The Health Promotion Model by Nola Pender (1982) provides a framework for understanding the complex interplay of individual, interpersonal, and environmental factors that influence health behaviors. It emphasizes the importance of empowering individuals to take control of their health and make informed choices that promote well-being (Aqtam et al., 2018).

It can be applied to understand and promote infection prevention and control (IPC) practices during the COVID-19 pandemic. Applying the model to COVID-19 IPC can help identify strategies for promoting and sustaining adherence to preventive measures. It highlights the importance of addressing individual beliefs, providing education, creating supportive environments, and fostering a sense of self-efficacy to encourage the adoption of effective IPC behaviors in the context of the pandemic.

This study is anchored on Nola Pender's Health Promotion Model. In the context of this study, Knowledge about COVID-19 is an essential factor influencing people's behaviors related to infection prevention and control. The HBM suggests that individuals who possess accurate and relevant knowledge about COVID-19 are more likely to engage in preventive behaviors. This includes understanding the modes of transmission, symptoms, and appropriate preventive measures, such as wearing masks, practicing hand hygiene, and social distancing (Kim et. al., 2022).

Attitudes refer to people's beliefs and evaluations of a particular behavior. In the context of COVID-19, attitudes can influence individuals' perceptions of the severity and susceptibility to the virus, as well as their beliefs about the effectiveness and benefits of preventive actions. Positive attitudes towards COVID-19 prevention and control, such as

perceiving it as a serious threat and believing in the effectiveness of preventive measures, are likely to increase the likelihood of adopting these behaviors (Karimy et. al., 2021).

Practices or behaviors related to COVID-19 prevention and control are influenced by knowledge and attitudes. The HBM suggests that individuals who have a good understanding of COVID-19 and hold positive attitudes towards prevention and control measures are more likely to engage in appropriate behaviors. This includes consistent mask-wearing, practicing good hand hygiene, adhering to social distancing guidelines, getting vaccinated, and following public health recommendations (Jeong et al.,2023).

Additionally, the HBM also takes into account other factors that can influence behavior, such as perceived barriers and cues to action. Perceived barriers refer to obstacles or challenges that individuals may encounter when attempting to engage in preventive behaviors. Examples include difficulties in accessing personal protective equipment, financial constraints, or conflicting information. Cues to action can be internal or external triggers that motivate individuals to take action. These cues can come from various sources, such as media campaigns, healthcare professionals, or personal experiences (Arceo et. al., 2021).

KAP studies are evident in the field of health sciences as such several studies have used this model during the current COVID-19 pandemic in gauging the KAP of several population groups including healthcare workers (Andrade et al., 2020). Knowledge is the basis of behavior change as such, it is a prerequisite for establishing prevention beliefs (Wen et al., 2021). The level of familiarity and awareness of certain IPC protocols as well as details pertaining to the SARS-CoV-2 virus affect or challenge an individual's beliefs, attitudes, preconceived notions, and biases on the topic of interest. Opinions and beliefs

towards the efficacy of IPC procedures bolster the chances of the individual to adhere and follow proper COVID-19 prevention and control measures.

Conceptual Framework

The study's independent variables are the respondents' sociodemographic profile, level of knowledge, and attitudes, and its dependent variable is the respondents' practices of COVID-19 IPCs. COVID-19 has developed a new experience for countries across the world. It has been highly recommended to strictly follow proper knowledge, positive attitudes, and preventive practices (KAP) to fight effectively against the pandemic. These positive health behaviors are requirements for an effective COVID-19 response. Students require these behaviors to be disseminated to other community people. Effective COVID-19 pandemic management requires an adequate understanding of factors influencing behavioral changes. Knowledge of COVID-19 Infection Prevention and Control

In this study, knowledge evaluates the extent to which individuals from a program know infection prevention and control measures regarding COVID-19. This attribute is not limited to knowledge of base facts but includes local knowledge and beliefs, knowledge of infection prevention control, awareness of the proper procedure, and literacy (Mulemi et al., 2017).

This knowledge-practice inconsistency has been observed in various settings in resource-limited and resource-rich countries and calls attention to the necessity for more than just educational initiatives to expand infection control practices. During the COVID-19 pandemic, science education has played an essential role in collaboration with the health department and other supporting fields. Science education has contributed to one's knowledge, but it also affects a person's general attitudes and practices toward infectious

diseases. Education may thus contribute effectively to controlling the pandemic, with students expected to implement behaviors according to their education. This can be done by assessing their level of knowledge, awareness, and familiarity with infection prevention and control against COVID-19 and related information about the virus, such as etiology and transmission.

Attitude towards Covid-19 Infection Prevention and Control

The attitude attribute distinguishes an individual's feelings, disposition, and those of other students regarding infection prevention and control. The significance of having a positive attitude toward infection prevention is unquestionable in preventing transmission (Mulemi et al., 2017).

The attitude toward COVID-19 plays a fundamental role in determining a society's readiness to accept behavioral change measures from health authorities and change misconceptions about the virus. Creating public awareness in the university and among students about infection control is vital. One of the most salient groups to tackle the pandemic is college students. Opinions and beliefs towards the IPC for COVID-19 can influence the practice of following standard protocols and provide more information to the surrounding community about the COVID-19 pandemic. In this way, science education can have a more significant and prolonged impact on disease management compared to technological intervention.

Practices on COVID-19 Infection Prevention and Control

Methods for protecting students from exposure to and infection with COVID-19 depend on exposure risk. That risk depends on the type of work being performed, the potential for prolonged interaction with people, and the contamination of the work

environment. In this case, infection prevention and control (IPC) practices are essential. The practice attributes document the actions related to COVID-19, right from prevention to control. Despite good knowledge, safe infection prevention practice increases the chance of infection control (Mulemi et al., 2017).

The prevention and control of COVID-19 and the appropriate management of infectious materials are essential for each individual. The laxity of proper methods and guidelines for infection control in a program is unsafe due to cross-infection. To introduce and induct effective control measures in college students, knowing basic hygiene principles and modes of disease transmission and actions in such an environment is vital.

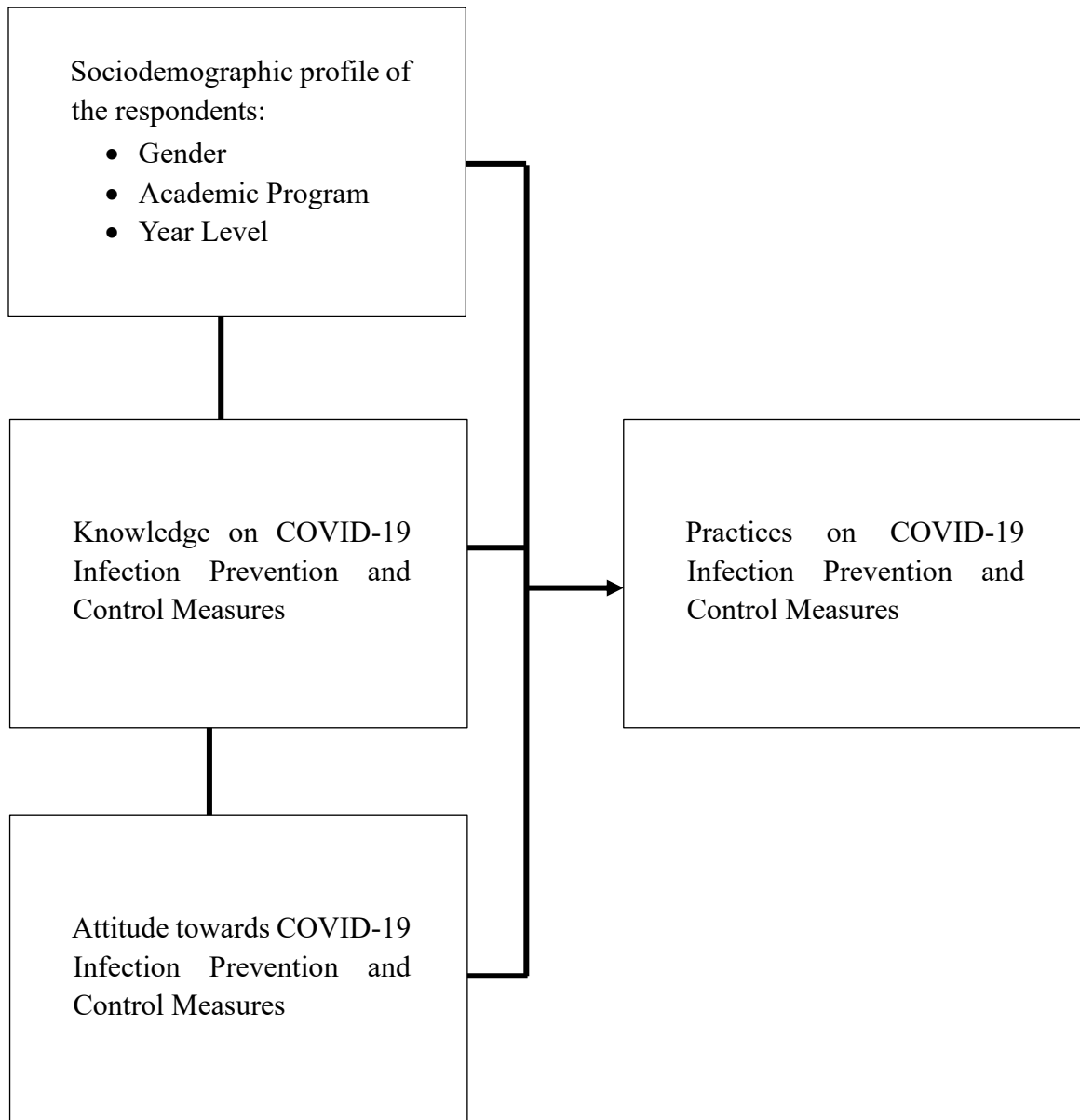


Figure 1: Schematic Diagram of the Study

Statement of the Problem

This study aimed to determine the level of knowledge, attitude, and practices on COVID-19 infection prevention and control measures of paramedical university students.

It sought to answer the following questions:

1. What are the respondents' sociodemographic profiles in terms of gender, academic program, and year level?
2. What is the respondents' level of knowledge on COVID-19 infection prevention and control measures in terms of etiology, risk group, transmission, and prevention?
3. What is the respondents' level of attitude on COVID-19 infection, prevention and control measures in terms of barriers and self-motivation?
4. What is the respondents' level of practices on COVID-19 infection, prevention and control measures in terms of prevention and healthy lifestyle?
5. Is there a significant relationship between respondents' level of Knowledge and Practices on COVID-19 infection prevention and control measures?
6. Is there a significant relationship between respondents' level of Attitude and Practices on COVID-19 infection, prevention and control measures?
7. Which group of paramedical students is most vulnerable during the limited face-to-face clinical exposure based on their levels of knowledge, attitudes, and practices on COVID-19 infection prevention and control measures?

Hypotheses

The following hypotheses were tested:

Ho1. There is no significant relationship between respondents' level of knowledge and practices on COVID-19 infection prevention and control.

Ho2. There is no significant relationship between respondents' level of attitude and practices on COVID-19 infection prevention and control.

Chapter 2

RESEARCH METHODOLOGY

This chapter presents the description of the research design, research setting, research respondents and sampling procedure, research instruments, data gathering procedure, data analysis technique, and ethical considerations.

Design

A quantitative, descriptive-correlational research design was utilized in this study in order to gather data on paramedical university students' levels of knowledge, attitude, and practices toward COVID-19 infection, prevention, and control measures. Descriptive-correlational research is a type of research design that tries to explain the relationship between two or more variables without making claims about cause and effect. This study utilized this research design to explain the relationship between knowledge, attitude, and practices on COVID-19 infection prevention and control measures among paramedical students.

Setting

This study was conducted at one of the tertiary institutions in Ozamiz City that offered paramedical programs specifically, Bachelor of Science in Nursing and Bachelor of Science in Medical Technology.

Respondents and Sampling Procedure

For this study, the population size (N) was 512, and the sample size was 220 respondents from the two paramedical academic programs (Nursing and Medical Technology), calculated using Slovin's formula. The inclusion criteria is as follows: (1) a student in the University currently enrolled for A.Y. 2021-2022; (2) must be enrolled in any of the paramedical programs (*Nursing, Midwifery, Radiologic Technology, and Medical Technology*) offered by the University; and (3) paramedical student that had and will have their limited face to face clinical exposure this academic year. Stratified random sampling was utilized to subdivide the population based on the program the respondent was enrolled in (Nursing and Medical Technology programs) and year level (second, third-, and fourth-year level). Then snowball sampling was utilized to reach the desired participants of the study. From the nursing program, the researchers procured 50 respondents from the 2nd year level, 34 respondents from the 3rd year level, and 26 respondents from the 4th year level. From the medical technology program, the researchers procured 49 respondents from the 2nd year level, 36 respondents from the 3rd year level, and 25 respondents from the 4th year level.

Instrument

The questionnaire consists of two parts (detailed information is presented in Appendix B: Research Questionnaire). The first part assesses the paramedical student's general information and demographic variables, including gender, year level, academic program enrolled, and year level. The second part of the questions contains 35 items to assess the paramedical student's KAP concerning the COVID-19 infection prevention and control measures. These questions were based on the 2020 WHO & CDC guidelines (CDC, 2021 & WHO, 2020). They were divided into three sections knowledge of COVID-19 IPC measures (15 items), attitude toward COVID-19 IPC measures (10 items), and practices on COVID-19 IPC measures (10 items). Below is the continuum used in the study.

Respondents' level of Knowledge on IPC

Weight	Continuum	Response	Interpretation
5	4.20-5.0	Strongly Agree	Very High
4	3.20-4.19	Agree	High
3	2.61-3.19	Not Sure	Moderate
2	1.81-2.60	Disagree	Low
1	1.0-1.80	Strongly Disagree	Very Low

Respondents' level of Attitude on IPC

Weight	Continuum	Response	Interpretation
5	4.20-5.0	Strongly Agree	Very Positive
4	3.20-4.19	Agree	Positive
3	2.61-3.19	Not Sure	Moderate
2	1.81-2.60	Disagree	Negative
1	1.0-1.80	Strongly Disagree	Very Negative

Respondents' level of Practice on IPC

Weight	Continuum	Response	Interpretation
5	4.20-5.0	Always	Very Good
4	3.20-4.19	Often	Good
3	2.61-3.19	Sometimes	Fair

2	1.81-2.60	Rarely	Poor
1	1.0-1.80	Never	Very Poor

Data Gathering Procedure

First, the researchers secured a letter of approval for the implementation of the study from the Dean of the College of Nursing and the College of Medical Technology. Second, with the Dean's approval, a pilot test was conducted to assess the validity and reliability of the instrument used. During the final gathering of data, the researchers identified the respondents through mutual connections, explained the intention and coverage of the study, and asked for their consent to participate in this study. Those who were not interested were replaced by other respondents following the same process of getting informed consent. A total of 247 participants were identified through stratified random sampling and snowball sampling for the pilot study. The questionnaire's link was distributed to the respondents through their Microsoft Teams account. The Google Forms questionnaire was then submitted after they finished answering, and the pilot testing results were checked for validity and reliability. Necessary modification according to the result of the pilot testing was made. After establishing the validity and reliability, the researchers proceeded to data gathering implementation. The data implementation followed the same procedure as the pilot testing through stratified random and snowball sampling.

A total of 247 (N) participants were recruited for this study. There were 124 from the College of Nursing (57 level 2, 36 level 3, and 31 level 4 students) and another 123 participants from the Medical Technology department (55 level 2, 43 level 3, and 25 level 4 students). The data-gathering procedure began by communicating with an identified respondent through Microsoft Teams to elicit their cooperation. The researchers then sent a link the respondent clicked on to lead to an online questionnaire on Google Forms. After completing the questionnaire, it was submitted and automatically recorded. Finally, the researchers asked the respondents for a referral to another possible individual capable and qualified to participate in the study, such as a classmate. The respondents were also allowed to send the link to a classroom group chat if the members were deemed qualified to participate in the study. The researchers protected the data from unlawful, unintentional, and unauthorized access or theft of the student's information

Ethical Considerations

The researcher adhered to the standard rights of all respondents; as such, they had the right to privacy and anonymity in which their names and other personal information were not collected. In any report that might be published, no information was included that would make it possible to identify a participant. The records of this study were kept entirely private and confidential. Research records were stored securely, and only the researchers involved could access the study. All forms and information related to the project will then be destroyed within three years after completion of the study.

Data Analysis Techniques

The data will be analyzed using the following statistical tools with the use of statistical software:

Frequency and Percentage are statistical tools used to analyze and summarize categorical data. They provide information about the distribution and relative frequencies of different categories within a dataset. Frequency and Percentage will be used in identifying the demographic profile of the respondents.

Mean and Standard Deviation will be used to identify the demographic profile of the respondents. The mean sum all the scores and divides it by the number of subjects. Standard deviation captures the degree to which the scores deviate from one another. Pearson Product Moment Correlation Coefficient will be used to explore the relationship strength between respondents' level of knowledge and attitudes towards COVID-19 and their practices on COVID-19 IPCs.

T-Test was used to compare the two groups of respondents as to the vulnerability of COVID-19 during the limited face-to-face clinical exposure based on their knowledge, attitudes, and practices toward COVID-19 infection prevention and control measures.

Chapter 3

RESULTS AND DISCUSSION

This chapter presents, analyzes, and interprets the data of the study which is arranged into the following topics.

Respondents' Socio-Demographic Profile

Respondents' Level of Knowledge on COVID-19 Infection Prevention and Control Measures

Respondents' Level of Attitude on COVID-19 Infection Prevention and Control Measures

Respondents' Level of Practice on COVID-19 Infection Prevention and Control Measures

Significant Relationship Between Respondents' Level of Knowledge and Practices on COVID-19 Infection Prevention and Control Measures

Significant Relationship Between Respondents' Level of Attitude and Practices on COVID-19 Infection Prevention and Control Measures.

Students Vulnerability towards Covid-19 During the Limited Face to Face Clinical Exposure.

Respondents' Socio-Demographic Profile

Table 1 shows the frequency and percentage of the respondents' sociodemographic profile in terms of: (gender, academic program, and year level).

Gender. It is shown that most respondents are females with 174 (70.49%) and males with 73 (29.55%). These results show that the female gender dominated the general population of both programs in the total number of respondents. The nursing profession has always been a female-dominated career. Even though most male-dominated careers in healthcare have balanced out the sex ratio, female-dominated careers have remained as they are (Grant et al., 2004). Gender differences can influence knowledge, attitudes, and practices regarding COVID-19 IPC. Cultural and social factors may play a role in shaping behaviors and perceptions differently among males and females. The results must be because many still perceive this profession as a woman's job. After all, they are still socially expected to nurture and care more than men.

Academic Program Enrolled In. This study revealed that there were 123 respondents (49.80%) enrolled in the Medical Technology program and 124 respondents (50.20%) enrolled in the Nursing program. A similar number of respondents from the two programs were selected randomly to create fair results. People with different educational backgrounds might demonstrate varying levels of knowledge and engage in different preventive practices.

Year Level. It is shown that there are 117 respondents (47.37%) who are second-year students, then 78 respondents (31.58%) who are third-year students, and 52

respondents (21.05%) who are fourth-year students. They might exhibit more knowledge about COVID-19 IPC, and their attitudes and practices may reflect their critical thinking skills and ability to evaluate information. In the general population of paramedical students, a trend can be observed. The population of students is observed to decline steadily as the year level increases.

Table 1.

Respondents' Socio-Demographic Profile

(n = 247)

Profile	Frequency	Percentage
Gender		
Female	174	70.49
Male	73	29.55
Academic Program Enrolled In		
Bachelor of Science in Medical Technology	123	49.80
Bachelor of Science in Nursing	124	50.20
Year Level		
First Year	-	-
Second year	117	47.37
Third Year	78	31.58
Fourth Year	52	21.05

Respondents' Level of Knowledge on COVID-19 Infection Prevention and Control Measures

Table 2 shows the respondents' level of knowledge on COVID-19 IPCs in terms of etiology, risk, group, transmission, and prevention.

Etiology. The table shows that the respondents have a *high* level of knowledge regarding the etiology of COVID-19 ($M=4.18$, $SD=0.31$). Etiology refers to the study of the causes or origins of a disease or medical condition. In the context of COVID-19, etiology refers to understanding how the disease is caused and transmitted. Because the table shows that the respondents have a *high* level of knowledge regarding the causation and transmission of the disease, it is appropriate to test the other components.

Risk Group. The table shows that the respondents have a *high* level of knowledge regarding the groups at risk of contracting COVID-19 ($M=4.12$, $SD=0.35$). The questionnaire specifically tested whether the respondents were aware that individuals of older age and the immunocompromised are more at risk than those who have no predisposing factors.

Transmission. The table shows that the respondents have a *high* level of knowledge regarding the modes of transmission of COVID-19 ($M=3.86$, $SD=0.69$). Understanding how the virus spreads helps individuals better understand how to prevent the spread of infection, such as wearing masks, practicing good hand hygiene, and avoiding crowded places.

Prevention. The table shows that the respondents have a *very high* level of knowledge regarding preventing the transmission of COVID-19 ($M=4.78$, $SD=0.41$).

A better understanding of how to prevent the spread of infection decreases the risk that the individual will be exposed to and contract the virus (Saati et al., 2022).

In summary, the table shows that the respondents of this study have a *very high* overall level of knowledge regarding COVID-19 IPCs (M=4.24, SD=0.44). The finding indicates that all the respondents can comprehend and answer the questionnaire curated to gauge the levels of knowledge, attitudes, and practices of paramedical students at Misamis University. It is important to gauge the level of knowledge because this will influence the attitudes and practices toward COVID-19 (Zhong B. et al., 2020).

Table 2

Respondents' Level of Knowledge on COVID-19 IPCs

(n = 247)

Constructs	M	SD	Remarks
Etiology	4.18	0.31	High
Risk Group	4.12	0.35	High
Transmission	3.86	0.69	High
Prevention	4.78	0.41	Very High
Overall Level of Knowledge	4.24	0.44	Very High

Note: Knowledge Scale: 4.20-5.0 (Very High); 3.20-4.19 High); 2.61-3.19 Moderate); 1.81-2.60 (Low); 1.0-1.80 (Very Low)

Respondents' Level of Attitude on COVID-19 Infection Prevention and Control Measures

Table 3 shows the respondents' level of attitude on COVID-19 IPCs in terms of barrier and self-motivation.

Barrier. The table shows that the respondents' level of attitude toward COVID-19 IPCs in terms of barrier ($m=4.80$ $SD= 0.38$) is very positive. Based on these findings, it can be inferred that individuals with more positive attitudes towards COVID-19 IPCs. Attitudes on COVID-19 IPC regarding barriers are critical as they reflect an individual's ability to recognize and address the obstacles they face in implementing preventive measures. Having a positive attitude towards barriers and employing effective practices can help individuals overcome challenges and find innovative solutions to ensure the safety of others.

According to the study of Saati et al. (2022), authentic and effective practical training may motivate the trainees to change their attitude toward a vital issue like commitment to infection control measures. In this study, medical undergraduates showed a positive attitude and more satisfaction with the applied infection control training to the extent that they recommended its repetition for other medical students due to its great value in saving their lives, also their families and patients' lives.

Self-Motivation. The table shows that the respondents' level of attitude and practices on COVID-19 IPCs in self-motivation ($m= 4.93$ $SD= 0.31$) is very good. Self-motivation refers to an individual's internal drive and determination to act and make choices based on their values, goals, and beliefs. In COVID-19 IPCs, self-motivation involves being proactive, responsible, and committed to protecting oneself and others from the virus. Self-motivated individuals are more likely to exhibit a strong sense of personal responsibility, adhere to recommended preventive measures, and maintain consistency in their practices. Attitude on COVID-19 IPCs in terms of self-motivation is essential as they

reflect an individual's intrinsic motivation to protect themselves and others from the virus. This internal drive can contribute to sustained adherence to preventive measures, even without external enforcement. Self-motivated individuals play a crucial role in collectively reducing the transmission of COVID-19 and mitigating its impact on public health.

Table 3

Respondents' Level of Attitude on COVID-19 IPCS

(n = 247)

Constructs	M	SD	Remarks
Barrier	4.80	0.38	Very Positive
Self-motivation	4.93	0.24	Very Positive
Overall Attitude	4.87	0.31	Very Positive

Note: Attitude Scale: 4.20-5.0 (Very Positive); 3.20-4.19 (Positive); 2.61-3.19 (Moderate); 1.81-2.60 (Negative); 1.0-1.80 (Very Negative)

Respondents' Level of Practice on COVID-19 Infection Prevention and Control Measures

Table 4 shows the respondents' level of practice on COVID-19 infection prevention and control measures in terms of prevention and healthy lifestyle.

Prevention. Based on the table, the respondents' level of practice in COVID-19 IPCs in terms of prevention is very good ($M=4.76$, $SD=0.44$). It shows that the respondents have a high level of practice regarding preventing the spreading of COVID-19. Respondents perform practical hand hygiene and prevention measures due to on-site training, return demonstrations, and evaluations that ensure the students will practice it. Standard precautions and hand hygiene are considered to be the most effective measures to prevent the spread of COVID-19. According to a study by Saati et al. (2022), Egyptian research revealed that the practice of medical interns for basics of infection control measures was significantly promoted by applying different training modalities.

Healthy Lifestyle. Based on the table, the respondents' level of practice on COVID-19 IPCs regarding a healthy lifestyle is very good ($M=4.53$, $SD=0.65$). The result shows that respondents follow good practices of healthy living style and proper self-management. According to the study of Udod et al. (2022), while hand washing is easier than healthy eating, physicians should emphasize modification of lifestyle factors and preventative health efforts such as quitting smoking, drinking less alcohol, and exercising daily, as these factors play a role in general health as well as COVID-19 disease progression.

Table 4

Respondents' Level of Practices on COVID-19 IPCS

(n = 247)

Constructs	M	SD	Remarks
Prevention	4.76	0.44	Very Good
Health Lifestyle	4.53	0.65	Very Good
Overall Attitude	4.65	0.55	Very Good

Note: Practices Scale: 4.20-5.0 (Very Good); 3.20-4.19 (Good); 2.61-3.19 (Fair); 1.81-2.60 (Poor); 1.0-1.80 (Very Poor)

Significant Relationship Between the Respondents' Level of Knowledge and Practices on COVID19 Infection Prevention and Control Measures

Table 5 shows the significant relationship between the respondents' level of knowledge and practices on COVID-19 among paramedical students in terms of etiology, risk group, and transmission.

Etiology. The table shows no significant relationship exists between the respondents' knowledge and practice regarding etiology and prevention ($r=0.11$ $p=0.07$) and etiology and healthy lifestyle ($r=0.10$ $p=0.13$). Etiology refers to the study of the causes or origins of a disease or medical condition. In COVID-19, etiology refers to understanding how the disease is caused and transmitted. Since the correlation is weak, other factors likely influence their practices. According to the study of Angelo et al. (2021), a possible reason may be due to a variety of enabling factors of awareness about the disease's exact cause, which socioeconomic and educational status may influence. This is, in fact, that socioeconomic status can impact awareness.

Risk Group. The table shows no significant relationship exists between the respondents' knowledge and practice in terms of risk group and prevention ($r=0.02$ $p=0.80$) and risk group and healthy lifestyle ($r=0.04$ $p=0.50$). According to a study by Olum et al. (2020), The risk of medical students acquiring coronavirus infection due to a lack of enough knowledge about COVID-19 is increased by the fact that there is asymptomatic carrier transmission of the coronavirus, which has been reported.

Transmission. It is shown in the table that the respondents' knowledge and practice in terms of transmission and prevention are highly significant ($r= 0.49$, $p=0.00$) and for transmission and healthy lifestyle ($r=0.70$ $p=0.00$). The result reveals that the respondents understand how COVID-19 is transmitted and are aware of being more careful about their

interactions with others, particularly in high-risk situations, such as being spread through respiratory droplets; unburied bodies can be a source of the spread of COVID-19.

According to the study of Saati et al. (2022), medical students more commonly practice hand hygiene for many reasons; the most important one is the COVID-19 pandemic and its great impact in pushing all individuals to wash their hands effectively. Understanding how the virus spreads, people are more likely to engage in preventive measures such as wearing masks, practicing good hand hygiene, and avoiding crowded places. They may also be more likely to educate others about the importance of these measures and promote responsible behavior in their communities.

Prevention. It is shown in the table that the respondents' knowledge and practice in terms of prevention and prevention are highly significant ($r = 0.47$, $p = 0.00$) and for prevention and healthy lifestyle ($r = 0.40$, $p = 0.00$). Standard prevention against COVID-19 was significantly high among paramedical students, indicating that the respondents understand COVID-19 prevention measurements and are more likely to identify high-risk situations and take appropriate precautions.

According to the study of Lee et al. (2021), knowledge can play a crucial role in enhancing the practice of public preventive behavior. Students who understand COVID-19 prevention measures are also more likely to follow guidelines set by health authorities and government agencies. They may be more likely to adhere to quarantine requirements and to report any symptoms or potential exposures to the virus. They may also be more likely to promote these practices among their peers and communities.

Table 5

Significant Relationship Between the Respondents' Level of Knowledge and Practices on COVID-19 IPCs

Variables	<i>r</i> value	<i>p</i> value	Decision	Remarks
Etiology				
Prevention	0.11	0.07	Do not reject Ho	Not Significant
Healthy Lifestyle	0.10	0.13	Do not reject Ho	Not Significant
Risk Group				
Prevention	0.02	0.80	Do not reject Ho	Not Significant
Healthy Lifestyle	0.04	0.50	Do not reject Ho	Not Significant
Transmission				
Prevention	0.49	0.00	Reject Ho	Highly Significant
Healthy Lifestyle	0.70	0.00	Reject Ho	Highly Significant
Prevention				
Prevention	0.47	0.00	Reject Ho	Highly Significant
Healthy Lifestyle	0.40	0.00	Reject Ho	Highly Significant

*Probability Value Scale: ** $p < 0.01$ (Highly Significant); * $p < 0.05$ (Significant); $p > 0.05$ (Not significant)*

Ho: There is no significant relationship between the respondents' level of knowledge and practices on COVID-19 IPCs

Significant Relationship Between Respondents' Level of Attitude and Practices on COVID-19 Infection Prevention and Control

Table 6 shows the significant relationship between respondents' level of attitude and practices on COVID-19 IPCs.

Barrier. The table shows that the respondents' level of attitude and practice on COVID-19 IPCs in terms of barrier and prevention ($r=0.53$ $p=0.00$) and healthy lifestyle ($r=0.54$ $p=0.00$) are highly significant. Based on these findings, it can be inferred that individuals with more positive attitudes towards COVID-19 IPCs, including barriers and prevention measures, as well as those who adopt a healthier lifestyle, are more likely to engage in corresponding practices to prevent and control COVID-19 transmission. Attitudes and practices on COVID-19 IPCs regarding barriers are critical as they reflect an individual's ability to recognize and address the obstacles they face in implementing preventive measures. Having a positive attitude towards barriers and employing effective practices can help individuals overcome challenges and find innovative solutions to ensure their safety and the safety of others.

According to the study of Saati et al. (2022), authentic and effective practical training may motivate the trainees to change their attitude toward a vital issue like commitment to infection control measures. In this study, medical undergraduates showed a positive attitude and more satisfaction with the applied infection control training to the extent that they recommended its repetition for other medical students due to its great value in saving their lives, also their families and patients' lives.

Self-Motivation. The table shows that the respondents' level of attitude and practices on COVID-19 IPCs in terms of self-motivation and prevention ($r=0.33$ $p=0.00$) and healthy lifestyle ($r=0.40$ $p=0.00$) are highly significant. Self-motivation refers to an individual's internal drive and determination to act and make choices based on their values, goals, and beliefs. In COVID-19 IPCs, self-motivation involves being proactive, responsible, and committed to protecting oneself and others from the virus. Self-motivated individuals are more likely to exhibit a strong sense of personal responsibility, adhere to recommended preventive measures, and maintain consistency in their practices. Attitude and practices on COVID-19 IPCs in terms of self-motivation are essential as they reflect an individual's intrinsic motivation to protect themselves and others from the virus. This internal drive can contribute to sustained adherence to preventive measures, even without external enforcement. Self-motivated individuals play a crucial role in collectively reducing the transmission of COVID-19 and mitigating its impact on public health.

Table 6

Significant Relationship Between the Respondents' Level of Attitude and Practices on COVID-19 IPCs

Variables	<i>r</i> value	<i>p</i> value	Decision	Remarks
Barrier				
Prevention	0.53	0.00	Reject Ho	Highly Significant
Healthy Lifestyle	0.54	0.00	Reject Ho	Highly Significant
Self-Motivation				
Prevention	0.33	0.00	Reject Ho	Highly Significant
Healthy Lifestyle	0.40	0.00	Reject Ho	Highly Significant

*Probability Value Scale: ** $p < 0.01$ (Highly Significant); * $p < 0.05$ (Significant); $p > 0.05$ (Not significant)*

Ho: There is no significant relationship between the respondents' attitude and practices on COVID-19 IPCs

Students Vulnerability towards Covid-19 During the Limited Face to Face Clinical Exposure.

Table 7 shows student's vulnerability during the limited face-to-face clinical exposure based on their levels of knowledge, attitudes, and practices towards COVID-19 infection prevention and control measures.

Based on their levels of knowledge, attitudes, and practices regarding COVID-19 infection prevention and control measures based on gender (Female $M=4.59$ $SD=0.31$) (Male $M=4.49$ $SD=0.36$), program (BSMT $M=4.63$ $SD=0.30$) (BSN $M=4.41$ $SD=0.36$), and year level (2nd Year $M=4.57$ $SD=0.32$) (3rd Year $M=4.54$ $SD=0.32$) (4th Year $M=4.39$ $SD=0.40$), the fourth-year male category of bachelor of science in nursing paramedical students are more susceptible during the limited face-to-face clinical exposure.

According to (Mark et al.,2022), Women also tend to believe that COVID-19 poses a serious health risk more than men, suggesting that worse attitudes may, in part, be related to concern about virus-related hospitalization and death. This difference has been seen on a larger scale, as multiple countries whose elected leaders are women have been praised for their caution and effective response to the pandemic. On the contrary, multiple countries whose elected leaders are men, such as the United States and Brazil, needed to be faster to recognize the severity of the virus and adopt national preventative measures. Women had higher practice scores compared to men.

This finding has been reported in relation to greater health-protective behaviors during the COVID-19 pandemic, such as mask usage. The discrepancy in practice scores could be because women, despite political affiliation, are less likely to subscribe to COVID-19 misinformation campaigns than men. Pandemic behavioral analysis

corroborates the finding that women are 50% more likely than men to subscribe to non-pharmaceutical behaviors and have more characteristics, such as agreeableness and conscientiousness, associated with compliance with public health behaviors. It has also been postulated that women, who traditionally assume caregiving roles, are more likely to view protective behaviors such as mask-wearing as a necessary precaution to keep their family safe. The vulnerability of the fourth year, perhaps this is due to the fact that the number of fourth-year respondents is significantly less than the respondent in the lower years.

Table 7

Students' Vulnerability Towards COVID-19 During the Limited Face-to-Face Clinical Exposure

Group	M	SD	Rank (Vulnerability)
Gender			
Female	4.59	0.31	2nd
Male	4.49	0.36	1st
Program Enrolled			
Bachelor of Science in Medical Technology	4.63	0.30	2nd
Bachelor of Science in Nursing	4.41	0.36	1st
Year Level			
Second Year	4.57	0.32	3rd
Third Year	4.54	0.32	2nd
Fourth Year	4.39	0.40	1st

Chapter 4

SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Summary

This study determined the level of knowledge, attitude, and practices of the paramedical students on COVID-19 infection prevention and control measures of paramedical students at Misamis University. The study was conducted at Misamis University, Ozamiz City, Misamis Occidental, Philippines. It used a qualitative, descriptive-correlational research design. The research respondents were 220 students who were randomly selected and were identified to be from year levels two, three, and four of the Nursing and Medical Technology programs. A modified questionnaire was used in data gathering, evaluated and validated by a panel of experts, and pilot tested for reliability on 12 students from both programs who were not included as the study's respondents. The data were analyzed using Frequency and Percentage, Mean and Standard Deviation, ANOVA test, Pearson's r Correlation Coefficient, and Regression Analysis.

Findings

The following were the salient findings of the study:

1. Most of the respondents, in terms of gender profile, were female and, in terms of year level, were in the second-year level.
2. The respondents had a high level of knowledge in terms of etiology, risk group, transmission, and very high knowledge in terms of prevention.

3. The respondents had a very positive attitude toward COVID-19 IPCs in terms of barriers and self-motivation.
4. The respondents had very good practice on COVID-19 IPCs in prevention and healthy lifestyle.
5. There was no significant relationship between the respondents' level of knowledge and practices on COVID-19 IPCs in terms of etiology and risk group. However, there was a highly significant relationship between the respondents' level of knowledge and practices on COVID-19 IPCs in terms of transmission.
6. There was a highly significant relationship between the respondents' level of attitude and practices on COVID-19 IPCs in terms of barriers and self-motivation.
7. The male fourth-year nursing students were the most vulnerable group of paramedical students during their limited face-to-face clinical exposure based on their levels of knowledge, attitudes, and practices toward COVID-19 IPCs.

Conclusion

1. There were slight differences between male and female paramedical students. Female students demonstrated slightly better adherence to COVID-19 prevention and control practices than their male counterparts.
2. Respondents had a very high level of knowledge of COVID-19, as they exhibit a heightened awareness of the risks associated with COVID-19 and are equipped with the necessary information to make informed decisions and take appropriate actions. Their comprehensive knowledge enables them to effectively communicate and

educate others about preventive measures, contributing to a safer healthcare environment and community.

3. Respondents demonstrate a strong commitment and willingness to engage in the recommended preventive behaviors. They exhibit a sense of responsibility towards their health and the health of others, recognizing the importance of implementing and adhering to preventive measures.
4. Respondents had good practices in safety and prevention. Respondents demonstrate good practice in COVID-19 infection prevention and control measures and have a strong foundation of knowledge and positive attitudes towards these measures. Their good level of practice suggests a high level of commitment and adherence to the recommended preventive behaviors.
5. The respondents had a high level of knowledge regarding COVID-19 infection prevention and control measures and exhibited better adherence to these practices in their daily lives and professional activities.
6. The respondents were more positive towards COVID-19 prevention and control. This highlights the importance of cultivating a positive attitude as a motivating factor for implementing and sustaining appropriate preventive behaviors.
7. The fourth-year male category of Bachelor of Science in Nursing paramedical students are more susceptible during the limited face-to-face clinical exposure.

Recommendation

Based on the findings of the study, the following are recommended to further improve the knowledge, attitudes, and practices of paramedical students regarding COVID-19 infection prevention and control measures.

1. Further explore this study with an increased number of respondents with consideration for equal sampling based upon their year level. Additionally, it is suggested to disregard the variable of gender when considering the results of the study because it is not feasible. After all, the existing male respondents in the accessible population are low.
2. Though the results indicate a generally high level of knowledge on COVID-19, it is recommended that the level of knowledge of paramedical students in terms of etiology, risk group, and transmission be increased as a measure to ensure that they are better equipped and more protected when in the clinical area.
3. Include a comparison of each paramedical program's knowledge, attitudes, and practices for studies assessing which program shows a higher or lower level of KAP.
4. To address the observed variations in the relationship between knowledge and practices, it is crucial to emphasize the practical application of knowledge through hands-on training and simulations. Practical exercises, such as role-playing scenarios or supervised practice in clinical settings, can enhance students' ability to translate their knowledge into effective infection control practices.
5. Further explore the relationship between the knowledge and practices of the paramedical students in relation to COVID-19 etiology and risk group.

6. Individually study nursing students' knowledge, attitudes, and practices based upon the specific clinical area they are exposed to.
7. To address the vulnerability of male fourth-year nursing students during face-to-face clinical exposure, tailored interventions should be implemented. This can include providing additional training sessions, mentorship programs, or dedicated support from faculty members and senior students to enhance their understanding and adherence to infection control measures

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APPENDICES

Appendix A: Letter of Request

June 2023

Jesus G. Ocapan Jr., PhD

Dean, College of Nursing and Midwifery
Misamis University, Ozamiz City

Dear Mr. Ocapan,

Good day!

The undersigned are 3rd year student of Misamis University, Ozamiz City taking up Bachelor of Science in Nursing and are currently working on a research study entitled **“Knowledge, Attitude, And Practices on Covid-19 Infection Prevention and Control Measures of Paramedical University Students”**

In this connection, the researchers would like to request your approval to allow them to conduct the study in selected college departments in Misamis University specifically the College of Nursing and Midwifery and the College of Medical Technology, the paramedical students undergoing limited face-to-face exposure are the respondents of the proposed research study. A questionnaire will be given to the identified participant to solicit their opinion or view on each statement.

Rest assured that all information derived will be treated with utmost confidentiality.

Respectfully yours,

(SGD)ZOIE ESTRELLE P. DELOS SANTOS
(SGD) CHRISTINE FARINA LUCERNAS
(SGD) CHRISTIANNE GAYLE V. LUMANOG
(SGD) VON NICHOLAS ADAM LUMANOG
(SGD) GLAIZA MAE H. YABO

Researchers

Approved By:

(SGD) Jesus G. Ocapan Jr., PhD

Dean, College of Nursing, Midwifery, and Radiologic Technology

Appendix B: Research Questionnaire

Knowledge Attitude and Practices on COVID-19 Infection Prevention and Control

Measures of Paramedical University Students

(To be answered by Paramedical University Students)

Part I: Profile

Direction: Put check (√) on the box according to the correct profile indicated below.

Gender:

☐ Female

☐ Male

Academic Program enrolled in:

☐ Bachelor of Science in Nursing

☐ Bachelor of Science in Medical Technology

Year level:

☐ 2nd Year

☐ 3rd Year

☐ 4th Year

Part II: Knowledge, Attitudes, and Practices

Direction: Put check (√) on the column that corresponds to your answer.

5 - Strongly Agree 4 – Agree 3 – Not Sure 2 – Disagree 1 - Strongly Disagree

5 – Always 4 – Often 3 – Sometimes 2 – Rarely 1 – Never

Statements	Responses				
	5 Strongly Agree	4 Agree	3 Not Sure	2 Disagree	1 Strongly Disagree
A. Knowledge					
Etiology					
COVID-19 is a disease caused by Coronavirus					
1. The main clinical symptoms of COVID-19 are fever, fatigue, dry cough, and myalgia.					
2. People with COVID-19 could also show no symptoms.					
Risk group					
3. Senior citizens aged 65 and older are at an increased risk of contracting the virus.					
4. People with COVID-19 who have chronic diseases such as diabetes, heart disease, and obesity have an increasingly severe condition.					
5. Children and teenagers do not need to make efforts to prevent COVID-19 infection because they have a strong immune system.					
6. People with weak immune system are more likely to get infected with COVID-19.					

Transmission					
7. People with COVID-19 who show no symptoms cannot infect the virus to others.					
8. COVID-19 is spread through the respiratory droplets of people infected with COVID-19.					
9. The dead bodies of people with COVID-19 who have not been buried can be a source of the spread of the COVID-19 virus.					
10. The buried dead bodies of people with COVID-19 can be a source of the spread of the COVID-19.					
11. Cannot penetrate cloth masks that are commonly worn by the public.					
12. COVID-19 only spreads through objects, it is not airborne.					
Preventions					
13. Currently, there is no effective drug for COVID-19, but the treatment of early symptoms and intensive care can help people with COVID-19 to recover.					
14. To prevent COVID-19 infection, we must avoid going to crowded places like markets and train stations as well as avoid using public transportation.					
15. Avoid travel across cities can prevent the spread of COVID-19.					
16. The transmission of the COVID-19 virus can be prevented by not touching the face.					
17. Isolation and treatment of people infected with the COVID-19 virus are					

effective ways to reduce the spread of the virus.					
B. Attitudes	5 Strongly Agree	4 Agree	3 Not Sure	2 Disagree	1 Strongly Disagree
Barriers to compliance					
1. Keeping up with the information regarding the number of COVID-19 cases is important for the community.					
2. After knowing the information on the number of cases of COVID-19, I felt worried/scared.					
3. Keeping up with the information regarding the government's call for COVID-19 preventive efforts is important for the community.					
Self-motivation					
4. I feel that person experiencing the symptoms or person infected should comply with the health protocols such as wearing mask.					
5. I feel that person experiencing the symptoms or person infected should isolate themselves for 14 days.					
6. I feel that person experiencing the symptoms or person infected should be motivated to increasingly implement COVID-19 prevention measures and ensure a healthy life.					
C. Practices	5 Always	4 Often	3 Sometimes	2 Rarely	1 Never

Prevention Practices					
1. In the last few days, have you worn a mask when you were in a crowded place?					
2. In the last few days, have you implemented physical distancing when you were in the crowd?					
3. In the last few days, have you used hand sanitizer when you were in crowded places?					
4. In the last few days, have you washed your hands with soap after going to a crowded place?					
5. In the last few days, have you washed your hands with soap after going to a crowded place?					
6. As a college student, have you educated people around you with the knowledge of the preventive efforts of COVID-19?					
Health Lifestyle					
7. I eat fruits and vegetables.					
8. I get enough rest.					
9. I am exercising routinely.					
10. I take vitamins or supplements.					
11. I clean my house more frequently.					
12. I have been washing my hand with soap more frequently.					

Appendix C: Informed Consent Form

MISAMIS UNIVERSITY
Ozamiz City
College of Nursing, Midwifery and Radiologic Technology

RESEARCH INFORMED CONSENT FORM

Title

This study is titled “Knowledge, Attitude and Practice on Covid-19 Infection Prevention and Control Measures of Paramedical Students in Misamis University” in partial fulfillment of the requirements for the degree of Bachelor of Science in Nursing.

Researchers

This study is to be conducted by Zoie Estrella P. Delos Santos, Christine Farina Lucernas, Christianne Gayle V. Lumanog, Von Nicholas Adam Lumanog, Glaiza Mae H. Yabo, who is pursuing the degree in Bachelor of Science in Nursing at Misamis University College of Nursing, with Sammy B. Taghoy as the adviser. The researcher can be contacted through this mobile number +639483875373 or email address gaylelumanog2001@gmail.com.

Purpose of the Research

This study aims to assess the KAP towards COVID-19 prevention and control among the paramedical students in Misamis University and explores the correlation between the level of knowledge on COVID-19 and how it influences the practices of infection prevention and control among paramedical students.

determine the knowledge, attitudes, and practices on Covid-19 infection prevention and control measures of paramedical students to generate the evidence needed in providing support to the improvement of COVID 19 infection reduction and control training to students of the paramedical programs in Misamis University.

Description of the Research

This study is a descriptive type of research, and the data will be gathered through a researcher-modified questionnaire within four (4) months.

Potential Benefits

This study will benefit the paramedical students to add to their knowledge and strengthen the acquired skills on the appropriate infection prevention and control measures (IPC) measures needed to prevent the development and transmission of infection, such as SARS-CoV-2. This will also benefit the paramedical college departments involved in the study in terms of utilizing the findings to generate the evidence needed in providing support to the improvement of COVID 19 infection reduction and control training to students of the paramedical programs in Misamis University.

Confidentiality

Complete confidentiality will be maintained during the study's implementation. No information that discloses your identity will be released or published unless you specifically consent to it and only if it is highly crucial. After data processing, the materials that included the raw information collected from you will be discarded within a certain time frame.

Publication

The findings of this research may be made public or scholarly in any medium utilized to enhance learning and develop additional knowledge for future use in education research.

Participation

Your participation in this study must be voluntary, and you have the right to withdraw if you do not agree with the findings. During the process of acquiring information from you, you may feel anxious.

Informed Consent

I confirm that the inherent risks, benefits, and alternatives have been considered. I have been informed based on the information given. I have read and understand this consent form, and I am aware that I am providing my consent. I am free to withdraw from the study at any moment if it is essential, or to seek alternative treatment. Any steps in the study process that are unclear will be clarified. My signature serves as proof of my identity willingness to take part in the research.

Printed Name and Signature of the Research Respondent

Date

CURRICULUM VITAE

PERSONAL DATA

Name Zoie Estrella Patigayon Delos Santos

Address Bonifacio Ext. Aguada,
Ozamiz, Mis. Occ

Date of Birth October 17, 2000

Father's Name Zandro John E. Delos Santos

Mother's Name Meldrin P. Delos Santos

Sex Female

Civil Status Single

Age 21

Educational Attainment

College: Misamis University

H.T. Feliciano St. Ozamiz City

Philippines

Senior High: Misamis University

H.T. Feliciano St. Ozamiz City

Philippines

Junior High: Misamis University

H.T. Feliciano St. Ozamiz City

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Intermediate: OCCS SPED Center



PERSONAL DATA

Name Christine Farina Lucernas
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Mother's Name Wilma M. Lucernas
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Senior High: Misamis University
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Intermediate: Seventh Day Adventist School



PERSONAL DATA

Name	Christianne Gayle Ver Lumanog
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Age	20



Educational Attainment

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Civil Status Single

Age 20

Educational Attainment

College: Misamis University

H.T. Feliciano St. Ozamiz City

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Senior High: La Salle University

Valconchia St., Aquada, Ozamiz

Philippines

Junior High: Ozamiz Montessori Center

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Philippines



PERSONAL DATA

Name	Glaiza Mae H. Yabo
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Father's Name	Miguel H. Yabo
Mother's Name	Grace Jane H. Yabo
Sex	Female
Civil Status	Single
Age	20



Educational Attainment

College:	Misamis University H.T. Feliciano St. Ozamiz City Philippines
Senior High:	Misamis University H.T. Feliciano St. Ozamiz City Philippines
Junior High:	Tangub City National High School Mantic, Tangub City Philippines
Intermediate:	Tangub City Central School Mantic, Tangub City, Philippines