

Conquering the Stormy Seas of Pandemic: Appropriateness and Effectiveness of a Quasi-Military Institution's Covid-19 Response

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ABSTRACT

The global health crisis brought about by the COVID-19 has disrupted and negatively affected even the education sector. Strict measures and plans to curb the spread of the virus were implemented nationwide, but a sudden surge of COVID-19 positive cases at the Philippine Merchant Marine Academy was experienced. Thus, this research generally aimed to discover how PMMA responded to the surge in terms of effectivity and appropriateness. This quantitative-descriptive research used a bilingual researcher-made survey questionnaire. Through the descriptive analysis of the data gathered, the study found out that the measures implemented (e.g., adequate meals for the stay-in respondents, consultation with relevant personnel, ensuring strict compliance with health and safety protocols.) were generally highly appropriate and highly effective. Even so, some practices must be corrected to ensure the safety of cadets and employees, including strict implementation/compliance to health and safety protocols, guidelines on quarantine facilities, and allowing COVID-19 negative students to stay inside the Academy. Given these, to ensure resiliency to future and similar circumstances, it is recommended that cadets who were sent outside for important reasons must be quarantined, a permanent emergency management team be created, a work from the home scheme will be implemented, and vaccination of all employees and cadets will be worked on.

Keywords — Social Science, COVID-19, response, appropriateness, effectiveness, maritime quasi-military, quantitative-descriptive, Zambales, Philippines

INTRODUCTION

Globally, as of July 9, 2021, there have been 185,291,530 confirmed Coronavirus Disease 2019 (Covid-19) cases, including 4,010,834 deaths, reported to World Health Organization. The spread of Covid-19 drastically affected the whole world, from the operations of big institutions, companies, and establishments down to the customary activities of the small units of society – the family. No one was spared from this dreaded and fatal culprit.

Covid-19 brings an immediate lesson in various aspects of a national government-equity, leadership, social justice, ethics, and patient care (Dewart et al., 2020). This pandemic, the greatest challenge that the national education systems have ever faced, will constantly modify the educational landscape. Many institutions were ordered to cease face-to-face instruction, requiring them to suddenly shift to online teaching and virtual education (Daniel, 2020).

In the Philippines, the Inter-Agency Task Force on Emerging Infectious Diseases (IATF-EID), created through Executive Order No. 168 in 2014, released resolutions containing recommendations for managing the Covid-19 situation. Even with the global emergency that required a declaration of enhanced community quarantine in Luzon, the Philippine Merchant Marine Academy (PMMA) opted to continue its operation.

As the only government-owned institution specializing in Maritime Education Training (MET), PMMA serves as the model of MET in the Philippines, with the mission to educate and train midshipmen/women to become competent merchant marine officers for shipboard and shore-based positions in response to the global requirements of the expanding international maritime industry (Ching, 2017).

According to Paragga et al. (2017), the discipline and training acquired from the quasi-military setup were very beneficial during the shipboard training of cadets. The physical training experienced by the cadets helped the trainees survive the daily activities and training onboard. Also, the military training experiences are very significant in the actual training onboard, which requires courage, commitment, perseverance, and tolerance. In the same study, the cadets agreed that military training significantly changed their attitudes towards anxiety and fear.

Being a regimented higher education institution, cadets of PMMA are provided with meals and are quartered at the PMMA dormitories for the entire period of their academic years, although under normal circumstances, they are allowed to go on short stay passes and end-of-term vacations. In the public

advisory released by the Academy on March 20, 2020, the Academy stated that the Administration, upon conducting risk assessment with the Department Heads, decided that it would be best to continue with their operations considering the distinct characteristic of PMMA.

The Commission on Higher Education (CHED) issued Advisory No. 7 on May 24, 2020, entitled Guidelines for the Prevention, Control, and Mitigation of Covid-19 in Higher Education Institutions (HEIs) for the HEIs to comply in order to continue still providing the learners quality education aligned with their respective visions and missions. The commission also released CHED Memorandum Order (CMO) No.4 S.2020, which aimed to provide learners with the highest flexibility in learning content, schedules, access, and innovative assessment, using digital and non-digital tools during this time of the pandemic.

In their research, Liu and Huang (2020) presented a few issues in online learning wherein, not every student can access the internet and have smart devices for their online learning. Academic integrity is an unavoidable concern in online teaching and learning, and plagiarism is a serious issue.

In addition to the CHED guidelines and memorandums, PMMA still developed and implemented policies and regulations to prevent being tremendously affected by COVID-19. Following Proclamation No. 922 by the President of the Philippines declaring the State of Public Health Emergency, the Academy released Memorandum Circular Order (MCO) No. 16 S. 2020, on March 11, 2020, whereby several Academy Bicentennial celebration events were postponed until further notice. Upon the release of the news on the first case of COVID-19 in Zambales, PMMA issued MCO No. 20 S. 2020 on March 26, 2020, stating its intensified efforts amidst the health crisis. When Central Luzon, including Zambales, was placed in General Community Quarantine, the Academy released MCO No. 30 S. 2020 on May 28, 2020. It was thereby ordered that returning employees secure health certificates that they are physically fit and free of signs and symptoms of COVID-19.

The university professional respondents in the study conducted by Indira and Sonia (2020) expressed that considering the safety and security of students and faculty, efforts are being taken for the smooth running of academic work and other operations of institutions during this pandemic. The biggest challenge faced by them is converting traditional education to e-learning. Also, they experienced difficulty in continuous planning and communications and developing the educational advancement with new educational solutions (like going online). Azman and Abdullah (2021) found out that in managing to teach and learn

amidst COVID-19 lockdown, it immediately became clear that the priority for Malaysian HEIs was to take care of the basic needs of students who remained on campus.

Despite the strictly implemented plans and measures, PMMA was still disturbed by the Coronavirus. PMMA first experienced the difficulties caused by COVID -19 on August 27, 2020, when seven incoming 3rd class midshipmen got infected by the virus. MCO No. 45 S. 2020 contains the order that certain areas within the Academy shall be off-limits to all unauthorized personnel. On March 19, 2021, one of the employees in the Academy was also tested positive for COVID-19, which was followed by five more employee cases. Two months after, the Academy was placed in a critical state due to the surge of COVID-19 positive cases, where 309 cadets were tested positive for the disease. In response to this disturbing problem, PMMA developed and executed various actions (by each unit and department) to address the problem.

Upon implementation of strategic containment on May 30, 2021, PMMA Memorandum Circular Order No. 19 S. 2021 was released with the order that all employees living outside the PMMA Complex will be on Work-from-Home (WFH) arrangement and shall not be allowed to come aboard PMMA throughout the 14-day quarantine period.

Based on the PMMA Memorandum Circular Order No. 23 S. 2021, the administrative employees should maintain zero contact with cadets. The order also allowed only 50% work operations. The Office of Academics, Training, Research, and Extension (ATRE), in cooperation with the Medical Unit, the Department of Midshipmen Affairs (DMA), and the two colleges, College of Marine Transportation (CMT) and College of Marine Engineering (CME), implemented different measures concerning the education and training of the members of the Corps of Midshipmen, to safeguard the welfare of the students and staff in terms of their health and safety.

Despite all these guidelines, the surge of COVID-19 positive cases in PMMA still transpired. This has fueled the conduct of this research. This study aimed at finding out how PMMA fared in responding to the recent surge of COVID-19 in terms of effectivity and appropriateness. It attempted to analyze the adaptation of factors and procedures implemented to respond the surge of positive cases in the Academy.

The first major practical use of this research is that it provides much-needed data to evaluate the appropriateness and effectiveness of the measures implemented by the Academy. This will allow PMMA to redesign the strategies

or measures depending on the needs of the stakeholders. Second, the study can be a basis for formulating an action plan during similar situations to address all internal stakeholders' needs. Third, it can also be used as a benchmark for future studies of other HEIs' COVID-19 responses. Finally, the study indicates the urgent need for vaccination of all employees and cadets, especially since cadets are quartered in the Academy, and face-to-face academics and training are practiced.

FRAMEWORK

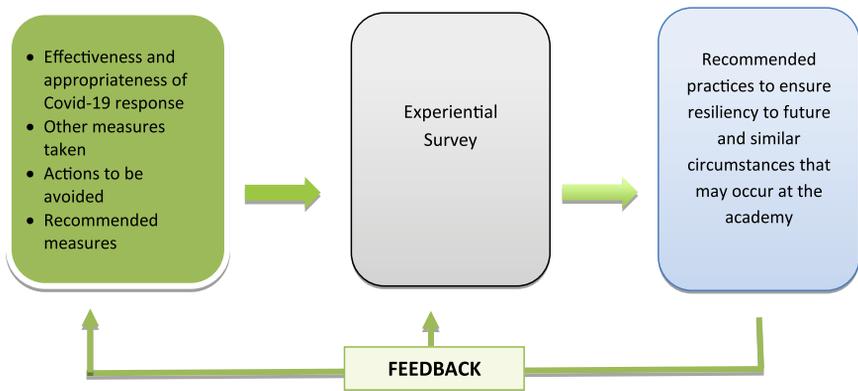


Figure 1. Conceptual Framework

As per the description of Durkheim, the social adaptation of individuals is linked with the existing normative structure of society (Scambler, 2009). Thus, social distance and isolation are defined to reduce the risk of Covid-19 in society, and individuals follow to reduce the risk of infection that results in solidarity and integration among individuals.

Relative to the Social Adaptation Theory, this research followed the input-process-output to assess how the PMMA adapted and responded to the Covid-19. Figure 1 illustrates that through the utilization of an experiential survey, this research gathered data to determine the effectiveness and appropriateness of COVID-19 response of PMMA, other measures are taken, actions to be avoided, and recommended measures. The analysis of the data gathered would yield recommended practices to ensure resiliency to future and similar circumstances at the Academy.

OBJECTIVES OF THE STUDY

Generally, the study focused on (1) finding out how PMMA fared in responding to the recent surge of Covid-19 in terms of effectivity and appropriateness, (2) identifying actions that must be avoided, (3) documenting measures that were taken but were not recorded, and (4) improving response through recommended measures. It was the hope of this research to make PMMA resilient to imminent and similar incidents in the future. As Benjamin Franklin says, “By failing to prepare, you are preparing to fail.”

METHODOLOGY

Research Design

The study used a quantitative descriptive research design to assess the effectiveness and appropriateness of the responses, measures, and policies of the PMMA. This methodology focuses more on the “what” of the research subject than the “why” of the research subject. It primarily focuses on describing the nature of a demographic segment without focusing on “why” a particular phenomenon occurs. In other words, it describes the current situation of the respondents, not covering “why” it happens. The variables of the study are as follows: (a) measures undertaken by the Academy, and (b) appropriateness and effectiveness of measures undertaken by the Academy.

Respondents

The respondents of the study are the 436 cadets/cadettes and the 70 male employees, and 24 female employees in the Academy. Furthermore, a total of 43 employees responded through an online survey, while 51 employees responded through the printed survey form.

Convenience sampling was used. This method is done by collecting research data from a conveniently available pool of respondents. It is the most commonly used sampling technique as it is incredibly prompt, uncomplicated, and economical. In many cases, members are readily approachable to be a part of the sample.

Instrumentation

The instrument used is a survey questionnaire with different parts and categories. It includes (1) the department where the employee respondent

belongs, (2) Sex, and (3) Case status of COVID-19 wherein the cadet-respondent identified if he/she is positive, negative, or suspected to have the disease.

The survey is in bilingual form using English and Tagalog Languages. Respondents, including the Executive Committee, Department of Midshipmen Affairs, Unit/Department Heads, Faculty Members, Medical Unit, Stay-in Finance Department, Dormitory Unit, and Cadets/Cadettes were invited to complete the online questionnaire through google form, while the other respondents such as the GRMU, Janitorial, Mess, and Security Unit were requested to complete the printed survey questionnaire in the Tagalog language.

The last part covered the respondent’s feedback on (1) practices that must be avoided or corrected to ensure the safety of cadets and employees and (2) other measures the respondents recommend preventing infection and immediate spread of the virus at PMMA.

The survey questionnaire used a three-point Likert Scale to identify the appropriateness and effectiveness of the measures undertaken with regards to the surge of COVID-19 positive cases inside the Academy. The appropriateness of these measures was rated from (1) not appropriate, (2) slightly appropriate, and (3) highly appropriate. On the other hand, the effectiveness of the measures undertaken was also rated from (1) not effective, (2) slightly effective, and (3) highly effective. The frequency of the conduct of the measures was also counted.

Due to the unexpected circumstances of the Covid-19 pandemic, particularly, the restriction of movement and the need for social distancing, the data collection for this study had to be conducted via the online survey platform and through hard copies. The distribution of the printed survey instrument was requested by an employee staying inside the Academy while adhering to the guidelines and following the protocols set by the Academy.

The collected data were processed and analyzed using Tables and Microsoft Excel. The Mean and Mode were also identified. Moreover, the range was computed to establish the range and provide the equivalent descriptive assessment.

	Appropriateness	Effectiveness
1 - 1.67	Not Appropriate	Not Effective
1.68 - 2.34	Slightly Appropriate	Slightly Effective
2.35 - 3.00	Highly Appropriate	Highly Effective

RESULTS AND DISCUSSION

Level of Appropriateness and Effectiveness of Measures Taken

Table 1. Highly Appropriate and Highly Effective Measures Taken from Executive Committee

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1. Consultation with Department/Unit Heads and other concerned personnel on an action plan to be taken.
 2. Conducted regular ExeCom meetings (Supt, AS-ATRE, AS-AF, Planning Director, and Acting QMR) to discuss the implementation of Covid-19 measures.
 3. Risk assessments are revised and updated to ensure appropriate safety measures are implemented.
 4. Tasked someone to coordinate with San Narciso IATF, RHU, and Provincial Health Office regarding the situation.
 5. Timely issuance of memorandum circular stipulating guidelines on the strategic containment
 6. Established flexible work from home and skeleton work arrangements.
 7. Provided timely and accurate information to employees and cadets/cadettes, especially to Covid19 positive to reduce uncertainty and distress.
 8. Advised on the procurement of immediate needs/supplies (foods, medical, etc.) in sufficient quantity and quality.
 9. Other measures:
Additional designated berthing area; reduce CDO and OOD to lessen possible exposure; use the electronic platform to make transactions/ appointments.
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Members of the Executive Committee have responded, as presented in Table 1, that they consulted with Department/Unit Heads and other concerned personnel weekly concerning the action plan to be taken. No organization can respond independently to the serious problems presented by the scope and scale of Covid-19. The pandemic goes beyond demographic, geographic, and organizational boundaries (Nembhard et al., 2020). The Academy coordinated with San Narciso IATF, RHU, and Provincial Health Office regarding the situation. All measures implemented were highly appropriate and highly effective, according to the ExeCom members. The high level of appropriateness and effectiveness of the measures conducted by the executive committee members is a result of their great efforts in combatting the disease. This is also what happened at the University of Taiwan. With proactive containment efforts and comprehensive contact tracing, the number of COVID-19 cases in Taiwan remained low: The

University in Taiwan had not recorded any domestic cases for 67 consecutive days (Cheng et al., 2020).

Table 2. Level of Appropriateness and Effectiveness of Measures Taken from Department/Unit Heads

COVID-19 Measure	Appropriateness		Effectiveness	
	Mean	QI	Mean	QI
Was consulted on the action plan to be taken.	2.80	Highly Appropriate	2.70	Highly Effective
Conducted meeting, which department/unit heads were included, discussed updates on the implementation of COVID-19 measures.	2.50	Highly Appropriate	2.50	Highly Effective
Coordinated with concerned personnel/ other departments on matters related to the implementation of strategic containment guidelines.	2.70	Highly Appropriate	2.80	Highly Effective
Provided real-time and accurate information.	2.50	Highly Appropriate	2.60	Highly Effective
Continuous service delivery and production of the output of your respective offices.	2.90	Highly Appropriate	2.80	Highly Effective
Other measures implemented				
a. Notify concerned individual	3.00	Highly Appropriate	3.00	Highly Effective
b. Skeletal workforce	3.00	Highly Appropriate	3.00	Highly Effective

The majority of the Department/Unit Head respondents have similar responses in all the measures indicated in the survey. For other notable measures, as shown in Table 2, one respondent stated that the concerned individual was notified as the need arises and a skeletal workforce was implemented daily. de Bruin et al. (2020) stressed that communication strategy on effective risk mitigation must be clearly and well-coordinated using all possible channels because this is vital in establishing trust with the people in a quickly evolving situation. All of the measures were deemed highly appropriate and highly effective with the continuous service delivery and production of output having the highest mean inappropriateness of 2.90 while the same measure and coordination with concerned personnel/other departments tied in highest effectivity rating of 2.80. Bhagat and Kim (2020) emphasized that, for universities and colleges to be

digitally resilient, they should be well-adjusted and prepared to adopt new systems and processes to ensure continued competitiveness and survival, especially when internal or external interventions force them to undergo certain disruptions.

Table 3. Level of Appropriateness and Effectiveness of Measures Taken from Faculty Members

COVID-19 Measure	Appropriateness		Effectiveness	
	Mean	QI	Mean	QI
Was consulted on the action plan to be taken.	2.30	Slightly Appropriate	2.20	Slightly Effective
Received regular updates from the college deans regarding the situation	2.40	Highly Appropriate	2.40	Highly Effective
Clear instructions were given for the continuation of classes/exams.	2.40	Highly Appropriate	2.40	Highly Effective
There was special instruction to exempt cadets/cadettes found Covid19 positive.	2.30	Slightly Appropriate	2.30	Slightly Effective
The existence of a program meant to address the delay of learning if there was special instruction to exempt cadets/cadettes found Covid19 positive.	2.20	Slightly Appropriate	2.20	Slightly Effective
Other Measures Implemented				
a. Covid-19 RT-PCR/Swab test	2.00	Slightly Appropriate	2.00	Slightly Effective

As presented in Table 3, faculty members perceive that the COVID-19 measures are effective and appropriate to a certain degree. Only two (2) measures got a highly appropriate and highly effective rating: receive regular updates from college deans regarding the situation, and clear instructions were given for the continuation of classes/exams. On the other hand, the rest were rated as slightly appropriate and slightly effective. Mina et al. (2020) recommended that there must indeed be a response plan that the universities must adapt to resolve the concerns of the faculty and staff, especially in reducing the spread of the virus without sacrificing the day-to-day transactions of the academic institutions. Jacob et al. (2020, as cited in Simon & Hans, 2020), who observed that the closure of schools, colleges, and universities not only interrupts the teaching for students around the world but also coexisted with major examination periods, many exams have been postponed or canceled. Furthermore, they recommended that the government increases the funding of higher education institutions in the next year's budget to manage all the damages caused by the Covid-19 school temporary closure.

Table 4. Highly Appropriate and Highly Effective Measures Taken from Department of Midshipmen Affairs

Was consulted on the action plan to be taken.

Ensured strict compliance with minimum health and safety protocols such as wearing of face mask and proper and frequent handwashing at the CADETS' QUARTERS.

Ensured strict compliance with minimum health and safety protocols such as wearing a face mask and proper and frequent handwashing at the QUARTERDECK AREA.

Checked and ensured the number of patients in each room in the quarantine area was enough to adhere to physical distancing rules.

Restricted MASS GATHERINGS of cadets through suspension of:

- a) formation at the parade grounds
- b) dining at the Mess Hall
- c) daily routines such as calisthenics
- d) morning, noon, and evening muster
- e) morning and evening colors

Implemented shifting schedule of the mess of cadets to avoid mass gathering and spread of the virus.

Cadets were not allowed to go ashore regardless of purpose.

Conducted disinfection of cadets quarters regularly.

Other Measures Implemented

Limited face to face between midshipmen/ women and Tactical Officers

Segregation of infected cadets from the healthy ones

Table 4 presents that for the Department of Midshipmen Affairs, only one (1) measure gained a unanimous response: restriction of mass gathering of cadets through suspension of dining at the Mess Hall for the full duration of the lockdown. In the study, Alfano and Ercolano (2020) indicated that lockdown is effective in decreasing the number of new cases in the implementing countries compared to non-implementing ones. This is indeed effective around 10 days after the implementation, and its efficacy continues to grow up to 20 days after.

Table 5. Level of Appropriateness and Effectiveness of Measures Taken from the Medical Unit

COVID-19 Measure	Appropriateness		Effectiveness	
	Mean	QI	Mean	QI
Was consulted on the action plan to be taken.	2.75	Highly Appropriate	2.75	Highly Effective
Ensured strict compliance with minimum health and safety protocols, such as wearing a face mask and proper and frequent handwashing.	3.00	Highly Appropriate	3.00	Highly Effective
Checked and ensured the number of patients in each room in the quarantine area is enough to adhere to physical distancing rules.	2.25	Slightly Appropriate	2.25	Slightly Effective
Coordinated with the Rural Health Unit and Provincial Health Office to conduct Rapid Antigen Test and RT-PCR Test for suspected cases and close contacts.	3.00	Highly Appropriate	2.50	Highly Effective
Ensured availability of medicines and other medical supplies for cadets/employees who have symptoms.	3.00	Highly Appropriate	2.75	Highly Effective
Coordinated with authorities if medicines and medical supplies were depleting to ensure a steady supply	3.00	Highly Appropriate	2.75	Highly Effective
Monitored the number of Covid-19 positive cases	2.50	Highly Appropriate	2.50	Highly Effective
Regularly monitored the health situation of Covid-19 positive cases	2.75	Highly Appropriate	2.75	Highly Effective
Coordinated regular clean-up and disinfection	3.00	Highly Appropriate	3.00	Highly Effective
Introduced measures for avoiding crowding and social mixing and encouraged employees and students to observe safe physical distancing	3.00	Highly Appropriate	2.75	Highly Effective
Used medical masks and other PPE according to tasks and applied standard precautions in providing patient care.	3.00	Highly Appropriate	3.00	Highly Effective
Provided face masks and face shields to cadets for free	2.75	Highly Appropriate	2.75	Highly Effective
Conducted regular disinfection of sickbay and quarantine areas	3.00	Highly Appropriate	3.00	Highly Effective

Organized swab testing for employees and cadets	3.00	Highly Appropriate	2.50	Highly Effective
Proper and easy coordination with Transportation Unit, DMA, OOS, OAS-AF, OAS-ATRE, and other concerned units/offices regarding measures to be implemented	2.75	Highly Appropriate	2.50	Highly Effective

As seen in Table 5, five measures were answered consistently by the Medical Unit Staff. Accordingly, nine measures got a perfect rating of 3.00 in terms of appropriateness. On the other hand, only four measures got a full 3.00 rating for effectiveness.

Conversely, checking and ensuring the number of patients in each room to ensure physical distancing got the lowest rating of 2.25 for both aspects, which implies that it is slightly appropriate and slightly effective. In addition to the above measures, healthcare systems must be established for the procurement and distribution, and adequate training must be provided to professionals in its use (Liu et al., 2020).

Table 6. Highly Appropriate and Highly Effective Measures Taken from Covid-19 Positive Cadets

Ensured strict compliance with minimum health and safety protocols such as wearing of face mask and proper and frequent handwashing.
The meals provided were varied and nutritious for the health of Covid-19 positive cadets/ cadettes
Quarantine facilities/rooms were large enough to ensure physical distancing
Provided with properly ventilated quarantine rooms
Beddings and other sleeping necessities were provided adequately
Swab testing was conducted in a timely manner
Medicines were immediately provided
Vitamins were given to boost immunity
Ensured availability of online counseling in times of anxiety, depression, fear, etc.
Ensured strict compliance with minimum health and safety protocols such as wearing of face mask and proper and frequent handwashing.
The meals provided were varied and nutritious for the health of Covid-19 positive cadets/ cadettes
Quarantine facilities/rooms were large enough to ensure physical distancing
Provided with properly ventilated quarantine rooms

Beddings and other sleeping necessities were provided adequately

In case of other needs, it was easy to convey to PMMA management.

Suspended formation at the parade grounds

Suspension of dining at the Mess Hall

Suspension of mass calisthenics.

Implemented shifting schedule of the mess of cadets to avoid mass gathering and spread of the virus

Limited number of cadets in the quarantine facilities/rooms to ensure physical distancing

Cadets were not allowed to go ashore regardless of purpose.

In case of other needs, it was easy to convey to PMMA management.

Other Notable Highly Appropriate and Highly Effective Measures Implemented

Regular disinfection of identified areas

Personal hygiene

Isolation of Covid-19 positive

Temperature checking

Use of online platform for activities

Maintenance of cleanliness

Physical distancing

Provision of supplies such as alcohol, disinfectants, mineral water, and medicines

Monitoring of DMA Commandant thru group chat

As seen in Table 6, the majority of the Covid-19 positive cadets/cadettes, who were the most affected by the sudden surge of cases in the Academy, always ensured strict compliance with minimum health and safety protocols. Relatedly, the following measures were implemented for the full duration of lockdown according to the majority of the respondents: suspension of formation at the parade grounds, suspension of dining at the Mess Hall, suspension of mass calisthenics, shifting schedule of the mess of cadets to avoid mass gathering and spreading of the virus, and staying aboard of cadets (not allowed to go ashore regardless of purpose). Moreover, Wild et al. (2021) emphasized that wearing face masks and following safe social distancing are two of the enhanced safety protocols that need to be followed in public places to prevent the spread of the virus.

Table 7. Highly Appropriate and Highly Effective Measures Taken from Covid-19 Negative Cadets

Compliance with minimum health and safety protocols such as wearing of face mask and proper and frequent handwashing.
The meals provided were varied and nutritious for the health of the cadets/cadettes
Cadets' quarters were disinfected regularly
Vitamins were given to boost immunity
In case of other needs, it was easy to convey to PMMA management
Suspended formation at the parade grounds
Suspension of dining at the Mess Hall
Suspension of mass calisthenics.
Implemented shifting schedule of the mess of cadets to avoid mass gathering and spread of the virus
Limited number of cadets in the barracks/rooms to ensure physical distancing
Cadets were not allowed to go ashore regardless of purpose.

As seen in Table 7, the non-COVID cadets experienced various measures in mitigating the spread of the virus in the Academy. In connection to these, the following measures were implemented for the full duration of the lockdown according to the majority of non-COVID/negative cadets: suspension of formation at the parade grounds, suspension of dining at the Mess Hall, suspension of mass calisthenics, implementation of shifting schedule of the mess of cadets to avoid mass gathering and spread of the virus, and staying aboard of cadets (not allowed to go ashore regardless of purpose).

Other notable measures implemented were the following: disinfection of barracks and mess hall, isolation/segregation of COVID-19 positive from others, regular cleaning/maintaining cleanliness, personal hygiene, mass testing, COVID-19 negative cadets were encouraged to be exposed to the sun, the conduct of online classes, checking of temperature, a limited number of cadets using head, delivery of meals in the battalion and other quarantine areas, and putting plastic cover at the quarters.

Table 8. Practices to be Corrected or Avoided

Practices	Count	%
Allowing negative cadets to stay inside the Academy	9	4.52%
Behavior	2	1.01%
Allowing employees to go ashore even if lockdown is implemented	9	4.52%
Guidelines in quarantine facilities	20	10.05%
Health-related practices	8	4.02%
Implementation/compliance to IATF/PMMA health and safety protocols	130	65.33%
Quality of meals (nutritious)	2	1.01%
Suspension of liberty of cadets	6	3.02%
Not conducting mass testing	6	3.02%
Provision of free supplies (face mask, alcohol, vitamins)	5	2.51%
Vaccination	2	1.01%
	TOTAL	199
		100.00%
Other Practices		
All the practices must be corrected		
Be proactive, not reactive		
Quality of quarantine facilities		
Change of beddings		
Class system		
Contingency plans		
Use of non-disposable mess kits		
Conduct face-to-face lessons		
Guidelines on how to treat Covid-19 patients		
Quality of quarantine facilities		
Mess kits of COVID-19 positive not gathered separately		
Conduct of activities must be online		
Mess kits must be permanent		
Personal responsibility		
No physical fitness activities		
The quick response of the medical team		
Segregation of cadets		
Tolerating AWOL		

Table 8 shows the respondents' insights on what practices must be corrected/avoided to ensure the safety of cadets and employees. Overall, it is noted that the highest is on implementation issues on released protocols. Respondents also stated that the guidelines on quarantine facilities must be corrected, as there could be implementation issues too, such as those who are not billeted in the quarantine areas must strictly not go near the areas where COVID-19 positive cadets are billeted; thus, all negative cadets must not fetch water, distribute mess, and perform other duties for those who are positive.

It can also be gleaned in the table that respondents stated that allowing cadets, especially those who are negative, to stay inside the Academy premises must be corrected. They believe that cadets, especially those tested negative, must be allowed to go ashore/home because confining them here where there are many cases would put them at high risk of infection. However, when lockdown is implemented, they suggested that employees must not be allowed to leave the Academy premises. Moreover, mass testing must be conducted instead of just testing those who are symptomatic since, accordingly, there may also be infected cadets but may just be asymptomatic. This way, it will be easier to contain the virus and prevent further spread.

Most of the highly appropriate and effective measures implemented by the Academy are being performed worldwide; indeed, governments around the world have employed highly operational public safety measures, including recommendations and other campaigns for improved hygiene practices, passing social distancing requirements, and restricting public gatherings (Trung, 2019).

Recommended Measures for Future and Similar Incidents from Respondents

To address other future and similar incidents, respondents recommend that PMMA must strictly adhere to the health and safety protocols issued by the national and local IATF. Allowing negative cadets to stay inside the Academy was also recommended.

Additionally, a suggestion was also made on the proper disinfection of outside packages, which should be done at the main gate. Relatedly, for the employees and Tactical officers that go in and out of the Academy, the Academy should have a Disinfection Tunnel, which is used by most public places like malls or supermarkets, which they called mobile thermometry disinfection tunnel.

Vaccination of all employees and staff was also recommended, as well as regular check-ups, provision of free vitamins and minerals to boost the immunity of everyone. Sufficient supplies such as a free face mask, face shield, alcohol,

disinfectant solutions, aerosols, hand sanitizers must also be provided to ensure compliance to health and safety protocols at all times.

CONCLUSIONS

The education sector is greatly affected by the COVID-19 pandemic. In the Philippines, Higher Education Institutions had to adjust to the new situation where face-to-face interaction is prohibited and should practice Online Learning. The PMMA opted to continue with its operations, considering the distinct characteristic of PMMA. However, unavoidable challenges caused by COVID-19 infection hit the Academy.

Based on the findings, it can be concluded that PMMA fared well in conquering the COVID-19 surge inside the Academy, with the fact that the lockdown was lifted on July 8, 2021, with zero casualties. The different measures evaluated were proven appropriate and effective as evaluated by the different sets of respondents. McCormack et al. (2021) cited Mukerjee (2014), affirming that agility is a strategy that, when implemented effectively, promises institutions not only survival but a way to thrive in a fast-changing situation.

Moreover, there were additional measures that other departments/units had implemented that supported the goal of eradicating the virus inside the Academy. Moreover, although most are better implementation of the existing measures, the recommended additional measures are signs that everyone takes their safety seriously.

RECOMMENDATIONS

To mitigate these challenges while also building a more resilient system that can withstand future and similar circumstances that may occur, the following are recommended: (1) continue implementing the safety protocols, including the conduct of immediate contact tracing, as guided by the IATF (national and local) and PMMA guidelines, (2) there should be stricter implementation and proper monitoring of some of the current protocols, (3) students who were sent outside for important reasons must be quarantined when they return. In a situation that students cannot avoid going ashore, well-defined guidelines and policies must be implemented upon going ashore and coming aboard, (4) a regular Work from Home (WFH) scheme (e.g., 3-days report, 2-days WFH) could be considered for implementation to lessen exposure in department/units that are output/

outcomes-based, (5) the vaccination of all PMMA employees and cadets must be worked on, (6) the PMMA comes up with a financial strategy to better implement the different protocols. A well-laid plan with a clear source of financial support can assist the Academy in the procurement request, and approval of funding from external sources, including that of the government and stakeholders, and (7) a permanent Emergency Management Team (EMT) could be created with the composition of (e.g., Medical [1], Safety [1], Planning [1], Finance [1], etc.) and their main responsibilities (i.e., create a readily implementable Crisis Management Plan (CMP) for all possible and future disaster- and health-related crisis, implement the CMP).

These efforts will help the Academy conquer the challenges of COVID-19 while also adapting more resilient and flexible approaches going forward. Future studies are further recommended, such as planning and implementation strategy, assessing learning online systems of the Academy, a survey on online platforms, development of online instructional materials appropriate to a new normal setting, and many more.

TRANSLATIONAL RESEARCH

The outcomes of this study could be translated into a short video clip showcasing the most appropriate and most effective strategies implemented in conquering the Covid-19 surge inside the Academy. Other institutions can utilize this material in planning and implementation strategy, assessing online learning systems, developing online instructional materials appropriate to a new normal setting and many more.

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