

# **Short Paper**

Monitoring and Evaluation of the Community Isolation Unit in Addressing the COVID-19 Pandemic: The Case of Partnership of Commission on Higher Education, Bicol University and Local Government Unit Gubat Sorsogon, Philippines

> Rosemarie R. Jadie Bicol University, Legazpi City, Philippines

Date received: April 3, 2022

Date received in revised form: May 4, 2022

Date accepted: May 14, 2022

#### Recommended citation:

Jadie, R. R. (2023). Monitoring and Evaluation of the Community Isolation Unit in Addressing the COVID 19 Pandemic: The Case of Partnership of Commission on Higher Education, Bicol University and Local Government Unit, Gubat, Sorsogon, Philippines. *Puissant*, 4, 623-636.

#### **Abstract**

The conduct of monitoring and evaluation is an effective means to document the achievements of a project. This study focused on the determination of measures conducted by the frontliners of the Local Government Unit of Gubat, Sorsogon, based on the Commission on Higher Education (CHED) and Inter-Agency Task Force (IATF) protocol, cost invested in the operation of the quarantine facility, good practices, and issues and concerns in the Community Isolation Unit. It used mixed-method research in determining the data gathered through a questionnaire and structured interview among 329 clients. The facility operation observed the CHED IATF protocol. Funding is well provided using the Municipal Health Office fund, 20% Development Fund of the Local Government Unit (LGU), and the national government Bayanihan fund. Good practices were employed in terms of following protocols, service to the clients, and maintenance of facilities. Issues and concerns were categorized into fear of contamination, poor facilities, lack of supplies, poor services, and management. The community isolation unit has been a good measure in preventing the spread of the disease. However, the LGU must still take actions to further improve its operation to sustain the facility until the COVID 19 is halted.

Keywords – monitoring, evaluation, community isolation unit, addressing, COVID-19 pandemic



## INTRODUCTION

The outbreak of the Corona Virus disease has created worldwide chaos among all the citizens of the world (Nicomedes & Avila, 2020). This occurrence has brought a huge effect on almost all the pillars of the society around the globe, such as the government, economic, social, education, religious, media and movie industry, business industries, and the like (Mofijur et al., 2021). People began to panic and thought of precautions to be done to avoid this illness. All activities were temporarily put on hold through lockdowns which started in the middle of March 2020. The government sector developed its strategy on how to mitigate the effects of this pandemic.

In the Philippines, the National Government organized the Inter-Agency Task Force (IATF) which was tasked to plan programs and services to combat the pandemic. One of the measures done was to establish the community isolation unit (CIU) facilities that will be used as a quarantine facility for people who were suspected as carriers of the disease. In this endeavor, the building infrastructure of the State Colleges and Universities was utilized as a CIU facility by the Local Government Unit. As such, the Bicol University Gubat Campus (BUGC) Buenavista site was chosen by the Local Government Unit of Gubat, Sorsogon, as a facility due to its favorable location which is far from Población and residents of the place.

The Community Isolation Unit started its mobilization on April 13, 2020, upon compliance of the Local Government Unit of the Municipality of Gubat, based on the standards set by the Commission on Higher Education (CHED), Inter-Agency Task Force (IATF), and the Department of Health (DOH) in addressing the COVID-19 pandemic. A memorandum of agreement between CHED, BU, and the Local Government Unit (LGU) of the Municipality of Gubat was effected on April 26, 2020, and the full operation commenced on April 28, 2020. The CIU was managed by LGU Gubat with fourteen (14) personnel who served as frontliners. The frontliners were divided into two (2) groups composed of two (2) medical doctors, three (3) nurses five (5) midwives, one (1) population program worker, and one (1) none medical staff. The two (2) groups with seven (7) members each work alternately for fourteen (14) days in the quarantine facility. They observed home quarantine for another fourteen (14) days and then be on duty again for another 14 days. All medical needs, personal hygiene kits, and foods were provided by LGU Gubat during their stay in the facility. A monitoring team composed of the BUGC Director and three (3) personnel of LGU Gubat was tasked to conduct weekly monitoring of the operation of the facility. A weekly report was submitted to CHED by the BU Gubat Campus Director which include the status of the physical setup of the facility such as the patient's room, dining area, wash area, comfort room, water sanitation and hygiene, frontliners on duty, logistics, and security and safety. The facility has to continue to operate until the COVID 19 is fully addressed.

# **OBJECTIVES OF THE STUDY**

The main objective of the study was to document the BU-CHED-LGU Community Isolation Unit operation in Combating COVID 19 in the Municipality of Gubat, a community isolation unit. Specifically, it primarily aimed to:

- 1. Determine the specific measures conducted based on CHED protocol in the establishment of the community isolation unit;
- 2. Identify the good practices in the community isolation unit (CIU)
- 3. Determine the budgetary cost invested in the operation of the CIU
- 4. Determine the perceived issues and concerns encountered and the solutions applied to address the problems.

## **METHODOLOGY**

#### RESEARCH DESIGN

The research primarily employed a mixed research design. Qualitative research was used to gather primary data through a descriptive survey in form of questionaries and interviews to describe the measures employed, cost invested, practices, issues, concerns, and solutions applied to address problems in the CIU. The questionnaire was validated by experts in research. Written reports of the LGU and guidelines on the CHED CIU were gathered as secondary data. Quantitative research was employed through frequency counts and percentages. The statistical data was gathered with the help of the frontliners and LGU personnel.

# **RESPONDENTS**

Respondents were selected using purposive sampling composed of 329 or 14.61% individual of the 2,252 clients based on raosoft.com and calculator net formula with a margin error of 5% and 95% confidence level. The respondents were male and female of legal age from 18-60 years old, who were classified by the Department of Health as locally stranded individuals (LSIs) who came back to the Municipality of Gubat to be with their families. In the community isolation unit, they were referred to as persons under monitoring (PUMs) and persons under investigation (PUIs) depending on the clients' manifested symptoms.

## RESEARCH INSTRUMENT AND DATA GATHERING PROCEDURE

For the community isolation unit clients, the researcher surveyed the community isolation unit established at the Bicol University Gubat Campus located at Buenavista

Gubat, Sorsogon. For the Local Government Unit Officials, the researcher conducted a face-to-face interview with the Municipal Health Officer, Office of the Municipal Planning and Development Officer, and Budget Officer to determine the cost invested in the operation of the CIU.

It strictly observed the IATF protocol on wearing of face mask and face shield, social distancing, and handwashing. The persons under monitoring (PUMs) and persons under investigation (PUI) were interviewed by the frontliners before they were sent to their respective homes. The researchers gathered the filled-up survey form during the weekly monitoring and evaluation visitation. Upon retrieval of the forms, papers were exposed to the sunlight for half-day to kill the virus. Documents were collated. The tabulator washed and sanitized hands after the activity. Other steps conducted were: research orientation with the CIU frontliners and M and E Team, conduct of interview with the CIU frontliners and municipal health officer, municipal development officer, and budget officer.

Furthermore, the letter asking permission to publish this study requested to the Municipal Mayor of the Local Government Unit of Gubat was favorably granted. The Local Government Officials believed that this paper will enable them to share the experiences and learnings gained in the implementation.

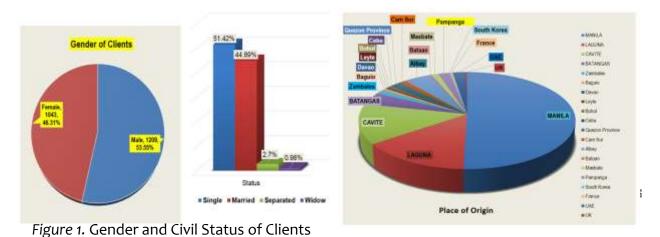
## STATISTICAL ANALYSIS OF THE DATA

The data gathered were tallied, analyzed, and interpreted using frequency count and percentages. The statistical data was gathered with the help of the frontliners and LGU personnel.

# **RESULTS AND DISCUSSION**

## **CLIENTS PROFILE**

The community isolation unit clients from April to December 2020 totaled 2,252, of which 1,043 are female and 1,209, 51.42% are single, 44.89% were married, 2.7% separated, and 0.98% widows. They were considered as Locally Stranded Individuals (LSI's) from the place of their origin, 50% from Metro Manila, and other clients from various places.



# SPECIFIC MEASURES CONDUCTED BASED ON CHED IATF PROTOCOL ON THE ESTABLISHMENT OF COMMUNITY ISOLATION UNIT

Figure 2. Clients' Travel Origin

Specifically, the following were the procedures done in the establishment of the community isolation unit (CIU): 1) Local Government Unit (LGU) sent a letter of request to Bicol University on the use of the building 1 & 2 as CIU; 2) Bicol University informed the Commission on Higher Education (CHED) on the request of the LGU; 3) Telecon arrangement and briefer preparation 4) Telecon meeting with LGU, CHED, and BU;5) MOA finalization; 6) Monitoring of State Universities and Colleges (SUC) Facilities. The partnership process was successfully undertaken to lead to the signing of the memorandum of agreement by the parties. The observance of the guidelines resulted in the smooth operation of the community isolation unit.

Additionally, the LGU has done other measures to formally operate the community isolation Unit (CIU) such were improving the SUC facilities by installing cubicles and constructing comfort rooms, purchasing foods, medicines, beddings, and personal hygiene kits, and preparing, posting, and implementing policy for the CIU operation, such as strict observance of health protocols: social distancing, handwashing, wearing of face mask and face shield. The Local Government Unit officials and personnel of the Municipality of Gubat strictly obeyed the protocol and the guidelines set by the Inter-Agency Task Force (IATF), Department of Health (DOH), and Commission on Higher Education (CHED) as specified in Figure 6 and Table 1.

#### GOOD PRACTICES IN THE OPERATION OF THE COMMUNITY ISOLATION UNIT

In pursuit of achieving the purpose of quality service in the community isolation unit despite the issues on COVID 19, the LGU frontliners have initiated strategies and processes that emerged as good practices that contributed to the smooth operation of the facility. These good practices provided an avenue for learning among the health workers on appropriate methods to implement to gain the best results.

Responsively, the clients and partners agencies involved in the day-to-day affairs of the facility employed good practices in the management of the community isolation unit categorized into health protocol, personnel administration, clients services, and physical facilities. Generally, the good practices have been effective in sustaining the operation of the CIU. The use of face shields and social distancing as health protocol reduce the possibility of contamination of persons in the quarantine facility by 68% to 76%.

Table 1. Timeline of Activities conducted in the establishment of CIU

Date	Activity	Outputs
April 14, 2020	Letter from the Municipal Mayor of Gubat	A letter was forwarded to the University President
April 15, 2020	Meeting and discussion on the IATF guidelines and clearing out of issues in the preparation of MOA with LGU, CHED, and BU	The partnership between the Local government unit (LGU), Commission on Higher Education (CHED and Bicol University (BU) was finalized
April 18, 2020	Discussion on the setting of the CIU meeting with CHED, BU, and LGU	The CIU facility was prepared and established by LGU with the participation of Bicol University as a member of the monitoring team.
April 28, 2020	Meeting with the Barangay Council of Buenavista and other stakeholders on the CIU project. Discussion on the proper use of Mask, Hand washing, social distancing, proper waste disposal, security and safety of the residents	The barangay council was able to understand the purpose of establishing the CIU. They also supported the CIU by deploying Barangay Tanods as additional security personnel in the vicinity of the facility.
April 30, 2020	Start of the operation of the CIU -monitoring, and discussion of the findings, report preparation	The CIU initially serves 28 persons under monitoring (PUMs)

Thus, a face shield is a useful aide to breathing protection for workers caring for patients with infections (Lindsley, et al, 2014). The practice of using masks and hand sanitizers and social distancing is effective to control the transmission of disease (Jeong G.H., et al, 2020). In Taiwan, the government implemented infection control measures to prevent the spread of coronavirus disease (Kou et al 2020). In Cameroon, good practices during the COVID 19 outbreak were wearing masks, handwashing, applying hand sanitizers, observing social distancing, and avoiding crowded places (Ngwewondo et al., 2020).

# Table 2. Good Practices of the LGU in the CIU implementation

**Observance of Health protocol:** They followed the CHED-DOH-IATF policies/protocol, social distancing, hand washing, wearing of PPEs, face mask, and face shield

#### **Personnel Administration**

- Have enough frontliners scheduled on duty for 14 days 24 hours duty and 14 days home quarantine alternately
- Observance of daily routine schedule
- Provision of hazard pay to the frontliners
- Stationing Municipal Disaster Risk Reduction Management (MDRRM) and police personnel, Barangay Tanods of Barangay Buenavista for the safety and security of the facility
- Assigning DRRM personnel, who served as information officers, liaisons for marketing, cooking, and delivery of foods in the facility
- Regular conduct of weekly monitoring and assessment of the CIU
- Regular submission of a report to CHED and DOH

#### Clients' services

- ✓ Strict observance of covid 19 protocol, social distancing, hand washing, wearing of face mask and shield.
- ✓ Meals were served for the clients 3x a day
- ✓ Provided activities like film showing, health lecture, exercises, prayer time
- ✓ Monitoring of vital signs e.g., body temperature, blood pressure,
- ✓ Provision of medicines and hygiene kits
- ✓ Provision of communication services in the facility-WIFI
- ✓ Conduct of sendoff program for the clients who completed the quarantine period
- ✓ Confirmed COVID cases were isolated at building 2 for transfer to a higher level of the facility
- ✓ Issuance of referral form to Barangay Health Emergency Response Team (BHERT) for PUMs who will undergo home quarantine or barangay isolation unit quarantine.

# **Physical Facilities**

- ✓ Cleaning of the facility 2x a day by a utility worker and with the client's participation,
- ✓ Disinfection of the facility 2x a day
- ✓ Provision of communication services in the facility-free WIFI
- ✓ Provision for beds, beddings, dining tables, segregated garbage bins at the facility, and regular laundry of beddings.

- ✓ Laundry services for washing of PPEs and beddings
- ✓ Ambulance on 24 hours duty

# FINANCIAL INVESTMENT IN THE OPERATION OF THE COMMUNITY ISOLATION UNIT (CIU)

Concerned about the welfare of its people the Local Government Unit of the Municipality of Gubat, mobilized resources for protecting the constituents. They sacrificed some programs and services for this purpose. About 33.71% of the fund was taken from the 20% development fund of the municipality, 26.70% from the Municipal Health Office Fund, while 39.59% came from the National Government Bayanihan grant to the Cities and Municipalities. Related to this, the use of the decision-making trial and evaluation laboratory (DEMATEL) method in the area of public health and the emerging COVID-19 pandemic, offered a practical decision for the government to allot resources and employ mitigation measures to ensure the welfare of the community and its constituents

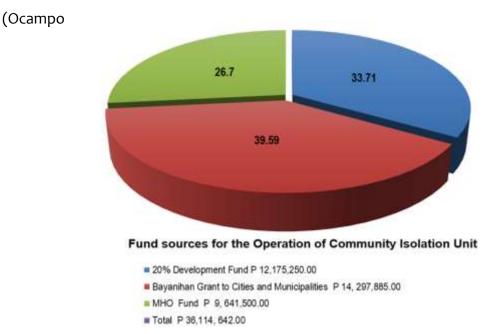


Figure 3. Fund Sources in the CIU Operations

Generally, all the mobilized fund was used to finance the procurement of medical supplies, welfare good, and food and accommodation of CIU personnel and clients, as well as for the improvement of the CIU building facilities. The budget items that consumed most of the funds were the cost of welfare goods, food, and accommodation of the clients and the CIU personnel which is Php 12,686,415.00 or 35% of the total budget, as reflected in Table3.

(2020).

Budget Item	The amount allocated for 2020	LGU Funds used for the Community Isolation Unit	Percent (%) of funds used for the Community Isolation Unit
мно	P 22,049812.00	9,641,500.00	43.73%
20% development fund	39,554.536.31	12, 175,250 .00	30.78%
Total funds		P 21,816,750.00	

This further move resulted in the control of the number of casualties in the municipality with only three (3) deaths and twenty-nine (29) cases recovered from COVID 19 disease. There is no casualty among the clients confined in the CHED-BU-LGU Community Isolation Unit during the period of study, as reflected in Figure 4.

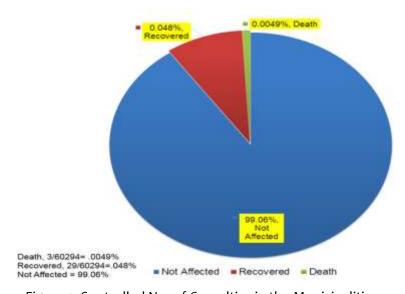


Figure 4. Controlled No. of Casualties in the Municipalities

Similarly, the government of Singapore employed large-scale organized isolation units called Community Care Facilities (CCFs) to battle the outbreak in the community by housing low-risk COVID-19 patients from April to August 2020. It converted existing public spaces to operate the CCFs to accommodate clients with 98 health care workers for 3200 beds A total of 3,758 patients were admitted to 4 CCFs with 4929 in-house medical referrals. Of which 136 patients were transported to a hospital, 1 patient died 2 weeks after discharge, and no health care workers became infected (Chia et al, 2020). The recent study is similar to the CIU implemented by LGU Gubat and it is not able to document that they were able to control the number of casualties despite the small number of health workers/frontliners.

Table 4. Issues and Concerns in the CIU and Solutions Undertaken

Issues and Concerns	Solutions
Fear of Contamination	
Do not allow clients from other rooms to visit other clients even though they knew each other to avoid contamination. As clients on the first floor go up to the second floor	Clients' orientation is conducted by the frontliners upon arrival at the CIU. They discussed to them the house rules. The frontline monitors the movements of the clients. House rules are posted in every room.
The cleanliness of the comfort rooms must be maintained to ensure the safety of the clients.	The LGU assigned janitorial staff to maintain cleanliness. Likewise, the client also asked to help in maintaining the cleanliness
Separate the Shower room for Children, male and female to avoid contamination	The frontliners ask parents to take their showers together with their parents.
All clients must undergo swab tests to ensure that they are healthy as they go back to their homes.	A swab test was conducted before sending the clients to their respective houses. The ambulance ferry the clients to their homes.
Facilities	
The water facilities must be improved	The LGU coordinated with Gubat Water District for the water supply but the water supplied by the district is poor.
Increase the number of comfort rooms	Comfort rooms were constructed at the back of the buildings.
There are insects inside the rooms due to dilapidated windows.	The window was fixed. Electric fans were provided to drive away insects.
There must be advanced preparedness in times of calamities like the typhoon in terms of brown-out, water supplies, and the like.	The LGU prepared the CIU before the typhoon happened. A standby generator is also provided during brownouts.
Supplies	
Place hand sanitizer in every room entrance	Hand sanitizers were placed at the entrance of the building only.
Shortage of Bed paraphernalia, like bed, beddings, bed sheet, blanket, and pillows.	The clients were allowed by the frontliners to bring their beddings through their relatives especially when the CIU has numerous clients. Beddings were provided also by LGU depending on the capacity of the supplies.

Table 4. Issues and Concerns in the CIU and Solutions Undertaken (cont.)

rubic 4. ibbacs and contents in the croama bolations office taken (conta)			
Issues and Concerns	Solutions		

Poor Services & Management		
Additional Volunteers to serve the Clients	The LGU deployed 14 medical frontliners, DRRM personnel and janitorial staff	
Preparedness of the frontliners in unforeseen circumstances is expected of the frontliners	The LGU personnel prepares ahead before the typhoon happens.	
Give added basic needs of the clients in the CIU and give the right services.	The LGU provided additional services like physical checks up and dental services for those who need them.	
We demand that all our concerns must be addressed especially the important ones.		

# ISSUES AND CONCERNS PERCEIVED BY THE CLIENTS AND SOLUTIONS APPLIED BY THE CIU FRONTLINERS

Issues and concerns in the quarantine facility are stressors for clients as well as the frontliners hence, it should be addressed promptly. This study shows the issues and concerns of the clients as perceived by the clients were categorized into fear of contamination, lack of supplies, and poor facilities. Brooks et al. (2020), in their reviewed studies, reported that among the stressors of quarantine facility clients are boredom, inadequate supplies, inadequate information, financial loss, and others. Researchers recommended that frontliners should observe the fourteen-day quarantine for clients, give orientation on the purpose of the quarantine, and provide sufficient supplies during the period. This research supports the findings of Brooks (2020). Significantly, the Local Government Unit through the frontliners is leniently addressing every issue and concern raised by the clients.

## CONCLUSIONS

The Local Government Unit officials of the Municipality of Gubat are true to their mission to protect and advance the right of the people to a balanced and healthful ecology in accord with the rhythm and harmony of nature (Section 16, Philippine Constitution). The protocol set by CHED, DOH, and IATF in the implementation of the community isolation unit was followed. The local officials and personnel protected the spread of COVID 19, in the community by investing in a huge fund and by exerting their utmost efforts to the best of their abilities. The partnership between CHED-BU-LGU Gubat has been instrumental in ensuring the safety and security of the constituents of the Municipality of Gubat. It has provided all the needs of the clients and frontliners in the community isolation unit such as medical supplies medicines and hygiene kits, daily medical check-ups (daily monitoring of vital signs e.g., body temperature, blood pressure, three meals per day for all clients and frontliners, beddings and psychosocial activities such as film shows, health lecture, exercises, prayer time. It has maximized its effort in the vaccination of almost 72 % of the entire population of Gubat. However, despite all the efforts done by the LGU still, there are lots of issues and concerns encountered every day

that needs to be addressed. Hence, readiness and preparedness in sustaining the operation of the facility are essential.

## RECOMMENDATIONS

The Local Government Unit (LGU) has to continue to operate the CIU until the lifting of the enhanced community quarantine and declaration that COVID 19 has been controlled. The need to organize and train more frontliners who will serve during emergencies similar to COVID 19 is a must. The training must be focused on meeting the needs of the clients and their welfare. Provision for post quarantine services such as psychosocial care and livelihood assistance may be offered. The construction of a permanent community quarantine edifice is of great priority. Such may serve as a rehabilitation and evacuation facility and as a halfway home for persons in need in times of emergency.

## **IMPLICATIONS**

Based on the findings of the study, the Local Government Unit of Gubat, Bicol University, and CHED, has done their best despite being a novice in this type of occurrence. It has invested much in terms of human resources and financial resources. It re-aligned the budget neglecting some of the projects intended to be accomplished for the year. The findings also reflect that indeed the partnership endeavors succeeded in combating the problem.

This study may give information on the role of academic institutions like Bicol University is collaborating with government and private agencies to address societal problems. This also may contribute to the improvement of the establishment of a partnership with LGU and other stakeholders. The local government units may realize that they can bank on SUCs as partners in project implementation. Hence, they may have the desire to seek SUCs for future partnerships. This study is significant in providing documentation of what transpired during the implementation of the measure to combat COVID 19, which shall be used as a basis for policy support for the government, state colleges, universities, and other stakeholders in the future. This may also serve as a showcase of the stories behind the project implementation through the documented results that will serve as references in the long run.

Additionally, for the students and community, this study may make them realize that SUCs are not only focused on the educational needs of the students but as well as in addressing community issues of the entire sectors of the society. For the community people, this study may give them the perception that they need to cooperate well with the government agencies as well as the SUCs to make all project undertakings successful. The good practices of this LGU-SUC-CHED Partnership project may inspire the entire globe to unite as one to uplift humanity.

## **ACKNOWLEDGEMENT**

This study is funded by Bicol University through Gubat Campus in partnership with the Commission on Higher Education and Local Government Unit of Gubat, Sorsogon. Acknowledgment is due to the clients, frontliners, and government officials of the three concerned agencies who participated in the implementation of the community isolation unit and conduct of this research.

# **REFERENCES**

- Brooks, S., Webster R. Smith L., Woodland L, Wessely, S. Greenberg N., Rubi, G.J.(2020)

  The psychological impact of quarantine and how to reduce it: a rapid review of the evidence. *The Lancet*, 395(10227). doi:10.1016/S0140-6736(20)30460-8
- Commission on Higher Education. (2021). CHED Guidelines on the Use of School Facilities as Quarantine Centers/Community Isolation Units. Retrieved from https://ched.gov.ph/ched-issues-guidelines-for-lgus-establishing-quarantine-centers-in-sucs/.
- De Vera, J. P.III.(2020).CHED, IATF Guidelines on the Use of School Facilities as Quarantine Centers/Community Isolation Units (CIUs). Retrieved from https://ched.gov.ph/chedissues-guidelines-for-lgus-establishing-quarantine-centers-in-sucs.
- Jeong G.H., Lee, H. J., Lee, J., Lee, J. Y., Lee, K. H., Han, Y. J., Ryu, S., Kim, D. K., Park, M.B. Yang, J.W., Effenberger, M.; Eisenhut, M., Hong, S.H., Kronbichler, Ghayda, R.A, Shin J.II (2020). Effective Control of COVID-19 in South Korea: Cross-Sectional Study of Epidemiological Data. *Journal of Medical Internet*, 22(12), e22103.
- Kuo, S.C., Shih, S.M., Chien, L.H., Hsiung, C.A. (2020). Collateral Benefit of COVID-19
  Control Measures on Influenza Activity, Taiwan, National Health Research Institutes,
  Zhunan, Taiwan. Retrieved from https://wwwnc.cdc.gov/eid/article/26/8/20-1192\_,
  Retrieve 6-8-2021
- Landy, F. J., & Conte, J. M. (2009). Work in the 21<sup>st</sup> Century: An Introduction to Industrial and Organizational Psychology. John Wiley & Sons.
- Lindsley, W. G., Noti, J. D., Blachere, F. M., Szalajda, J. V., & Beezhold, D. H. (2014). Efficacy of face shields against cough aerosol droplets from a cough simulator. *Journal of Occupational and Environmental Hygiene*, 11(8), 509-518.
- Mofijur, M., Fattah, I. R., Alam, M. A., Islam, A. S., Ong, H. C., Rahman, S. A., ... & Mahlia, T. M. I. (2021). Impact of COVID-19 on the social, economic, environmental and energy domains: Lessons learnt from a global pandemic. *Sustainable Production and Consumption*, 26, 343-359.
- Ngwewondo, A., Nkengazong, L., Ambe, L. A., Ebogo, J. T., Mba, F. M., Goni, H. O., ... & Oyono, J. L. E. (2020). Knowledge, attitudes, practices of/towards COVID 19 preventive measures and symptoms: A cross-sectional study during the

- exponential rise of the outbreak in Cameroon. PLoS Neglected Tropical Diseases, 14(9), e0008700.
- Nicomedes, C. J. C., & Avila, R. M. A. (2020). An analysis on the panic during COVID-19 pandemic through an online form. *Journal of Affective Disorders*, 276, 14-22.
- Ocampo, L., & Yamagishi, K. (2020). Modeling the lockdown relaxation protocols of the Philippine government in response to the COVID-19 pandemic: An intuitionistic fuzzy DEMATEL analysis. Socio-economic planning sciences, 72, 100911.
- Philippine Constitution 1987. Official Gazette, retrieved from http://hrlibrary.umn.edu/research/Philippines Constitution .pdf