

COVID-19 Practices of Frontliners in Cagayan: A Cross-Sectional Study

Jake B. Canapi

College of Allied Health Sciences, Cagayan State University- Andrews Campus, Luquilu, Cabagan, Isabela, PHILIPPINES, jakecanapi@csu.edu.ph,

Funding Agency

This study was funded by the Department of Health R02, Cagayan Valley Center for Health Development (DOH-CVCHD), Philippines.

Abstract

A standardized framework for health-care practices provides an excellent opportunity for frontline workers to efficiently and effectively perform standard operating procedures, showcase optimal well-being, and achieve global health standards. A thorough assessment and review of patient management among frontline staff will benefit the healthcare management team. Hence, to become considerably more responsive and prepared for future pandemics, the health-care system must have standardized care practices. This descriptive-correlational research, surveyed three hundred eighty-four (384) randomly selected hospital and community frontliners working in the government hospitals and local government units in the province of Cagayan, Philippines. Respondents including Medical Doctors, Nurses, Medical Technologists, Respiratory Therapists, Radiologic Technologists, Midwives, Ambulance Crew, Janitors, Security Guard, members of the Barangay Health Emergency Response Team were interviewed through Phone Assisted Survey. Results showed that frontliners have good practices during CoViD-19 pandemic. Moreover, living status ($p=0.0496$) and occupation ($p<0.001$) are factors influencing practices. Respondents living with someone manifest significantly higher practice scores compared to those living alone. Correspondingly, allied health professionals display better practice scores than non-allied health.

Keywords: Practices, Frontliners, COVID-19, Cagayan, Philippines, Community-based, Hospital-based

INTRODUCTION

The unpredictability of global disease outbreaks always demands a handful of interventions to mitigate unbearable consequences. Frontliners in the middle of the conflict must receive a sustainable standard protective measure to meticulously address and resolve the alerts in the battleground. With respect to our healthcare workers, their scope of practice should never be mediocre. The grips of their arms call for security, which in turn elicits feelings of respect and dignity.

As stipulated in Rule VII. REGULATION Section 27. Safety and Quality of the Republic

Act No. 11223 also known as Implementing Rules and Regulations of the Universal Health Care Act; the Clinical Practice Guidelines (CPGs) based on best evidence will be established, examined, and used by the Department of Health in partnership with professional organizations and institutions to support healthcare workers in patient care and clinical management. As importantly, the Department of Health and Human Services should establish a process for the formulation, implementation, and promotion of Clinical Practice Guidelines (DOH, 2019).

In the Philippines, the Field Epidemiology Training Program (FETP) is part of a global network of FETPs. In 2017, the Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET) was accredited. To emphasize, the objective is to guarantee the timely discovery and treatment of disease outbreaks. However, comprehensive disease surveillance necessitates tight integration with the Bureau of Quarantine. Sadly, communication between hospitals and local governments remains a problem (World Health Organization, 2011).

With the CoViD-19 fragments, healthcare practitioners are constantly on the center stage, patiently risking themselves to a heightened rate of becoming vulnerable to virus just to resolve the current issue (Dy & Rabajante, 2020). Unfortunately, due to insufficient funding for health facilities along with shortage of healthcare workers, an effective public health system is not visible. In fact, even before the pandemic, discrepancies in the deliverance of health needs put frontliners in jeopardy (Espiritu et al., 2021)

In an unfortunate circumstance, contagious disease-driven economic malaise is seen to have a disproportionately negative impact on women, recognizing them as the forefront of the CoViD-19 outbreak as they constitute more than 70% of the overall health-care workforce, putting them at risk of infection while being marginalized in management and decision-making (Ramos, 2020). In this regard, several women working in hospitals and community health centers may find it difficult to balance their roles as frontline workers and unpaid caretakers at home (Organisation for Economic Co-operation and Development, 2020). Hence, the will power to continue holds the human system fueled.

On the other hand, due to uncertainties surrounding CoViD-19, the value of frontliners is at an all-time high, raising concerns about employment security. In actuality, several studies have demonstrated a difference between contractual and regular employees' underpinning behaviors and actions (Dyne & Ang, 1998). To note, employees with permanent jobs have a lower incidence of acquiring chronic diseases,

paving the way to a higher state of well-being (Virtanen et al., 2002). In general, employment security could be viewed as a subsection of a broader concept of work security (Hartley et al., 1991). This implies that job satisfaction is a key element to unwavering commitment.

The stringent requirements set forth by the Inter Agency Task Force (IATF) concerning CoViD-19 triggered the healthcare workers' potential to adopt more secure and cautious modalities to protect their loved ones. Besides, in a study conducted, individuals with a larger scope for social interactions have a higher quality of life since interactions provide a sense of belonging and an atmosphere in which people can trust each other and communicate issues (Amati et al., 2018). Based on the findings, those who lived together throughout the CoViD-19 outbreak claimed that they thrived during this period (Evans et al., 2020), as manifested by their heartfelt desire to provide care and comfort at times of unwell conditions (Mudrazija et al., 2020). This suggests that interpersonal relationships are an incredible factor in burning out weariness as CoViD-19 pandemic unfolds.

With this, the researcher assessed and investigated the practices of Frontliners during the CoViD-19 pandemic.

METHOD

Research Design

The principal purpose of this project is to evaluate the practices of frontliners during CoViD-19. This implies that a descriptive comparative research design was used in the study where respondents' practices were compared when they are grouped according to their profile variables.

Research Environment

The study was conducted in the province of Cagayan. The researchers included all public health facilities both the Community Health Facilities and Public Hospitals in the study. The study was conducted in this area because of both active direct and indirect involvement of the frontliners during the COVID-19 pandemic. Data gathering commenced immediately after

the approval and release of Ethics Clearance by the Ethics Review Board.

Data Gathering Procedure

Respondents of the Study and Sampling Procedure

Respondents of this study were only delimited to community health workers and frontliners in hospitals during the COVID-19 pandemic who were (a) either directly or indirectly involved in the assessment diagnosis, treatment and rehabilitation, (b) had either been contracted (and recovered) or not with covid-19 virus and (c) working in public health care agencies under any of the following levels of preventive care: primary, secondary and tertiary. Meanwhile, frontliners who have documented history of mental illness were given discretion not to participate in the study.

The researchers sourced out data from the Community Health Facilities and Public Hospitals in Cagayan. Respondents taken from Community Health Facilities included those under (a) direct care (like Municipal/City Health Officer, Medical Doctors, Nurses, Medical Technologists as well as the members of Barangay Health Emergency Response Team [BHERT]), (b) indirect care (patient transport vehicle driver, ambulance crew). Meanwhile, respondents taken from the hospitals are those who were involved in (a) direct care which includes Medical Doctors, Nurses, Nursing Aide, Medical Technologists, Respiratory Therapists and Radiologic Technologists, (b) indirect care specifically included Janitors and Security Guards.

From there, the researchers used the Cochran's formula to determine the sample size for the study with a confidence interval and margin of error of 95% and 5%; respectively. Researchers then used stratified random sampling in choosing the respondents of the study. The computed scientific sample size is three hundred eighty-four (384).

Those identified frontliners who were willing to be the respondents of the study were reached through their respective agencies to solicit their participation. The content of prior and informed

consent form was discussed to them informing each participant of the purpose of the study. Only those who voluntarily participated were taken as the respondents of the study. Data gathered was handled based on the Data Privacy Act of 2012 and was treated with utmost confidentiality. The interview only advanced to the proper survey once the respondents signified the willingness to be respondents of the study.

With the unprecedented increase in the number of covid-19 cases, phone assisted survey was utilized as the mode of data collection. With this, responses for hospital frontliners and community health workers were gathered thru phone assisted survey. The researcher read the content of the informed consent form before the respondent after which, the researcher asked the permission of the frontliners to go on with the phone assisted survey. If the respondent responds positively, it implied that they are willing to participate voluntarily in this study and that responding to the questions being asked was their free and independent choice.

Contact details of the randomly selected respondents were obtained from the respective hospitals, RHU and barangays. The researchers also requested the concerned agency to arrange the schedule with those who will be interviewed to ensure the identity of the target respondents.

The primary data gathering tool for this study was survey questionnaire. The quantitative result of the data was validated through an in-depth interview with the respondents. To ensure that the instrument, will not in any way, impose psychological risks and mental-health related harm on the respondents, it has undergone validation by mental health experts and found to be free from any form of aforementioned harm and risks. Throughout the conduct of the study, there were no cases of respondents who had been negatively impacted by the content of the questionnaire.

In addition, researchers strictly observed the Inter-Agency Task Force (IATF) guidelines during the collection of the data in order to protect both the researchers and respondents of the study from contracting the COVID-19 virus.

Research Instruments

The study investigators used researcher-made questionnaire as a primary tool for data gathering.

The researchers strictly abided the ethical and legal standards in the conduct of this study. Research Ethics Clearance was sought from Region II Trauma and Medical Center (R2TMC) prior to the conduct of the study. Permission to conduct the study was sought from the Local Chief Executives, Heads of the RHU's and Hospitals before data collection commenced. Informed consent was voluntarily given by the respondents after an explanation was made by the researchers of the nature and purpose of the study and confidentiality was ensured throughout the conduct of the study.

In designing the survey questionnaire, researchers reviewed pool of literatures and the tool was validated by content experts as suggested by Zamanzadeh et al. (2015) where Content Validity Index (CVI) was computed. If the overall CVI is higher than 79 percent, the instrument is appropriate; if it is between 70 and 79 percent, it needs revision; if it is less than 70 percent, instrument is invalid, unclear and irrelevant. With this, the tool has been validated by the content experts and has a computed Content Validity Index (CVI) of 96.24 which implies that the instrument was appropriate.

The tool underwent pilot testing. After which the instrument's internal consistency was examined by determining the value of the Cronbach's alpha wherein the computed value was 0.74 which reflected the uni-dimensionality of the tool. Prior to the use of the questionnaire, it was translated into local language (Tagalog and Ilocano) by the researchers to facilitate better understanding of the questions among the respondents.

The questionnaire was divided into two sections. The first section was about the demographic profile, socio-economic, employment and medical history of the respondents. Meanwhile, the second section contained items that evaluated the practices of the frontliners during the CoViD-19 pandemic.

Treatment of Data

The data on respondents' profile and practices were described using descriptive statistics. 25th Quantile regression was carried out to determine the difference on the respondents Practices when grouped according to profile variables. The hypotheses in the study were tested at .05 level of significance. All the analyses were conducted using Statistical Package for the Social Sciences (IBM SPSS Statistics v.20, 2011.).

Ethical Considerations

Prior to the conduct of this study, the researchers sought permission from the local chief executives, heads of rural health units and hospitals and respondents through letter. The letter briefly explained the background of the study and the manner by which the data will be collected and processed.

Before the respondents answered the survey questionnaire, the researchers explained to them the purpose of the study. The Informed Consent Form (ICF) was read before during the preliminaries of data gathering. Only when they have verbally given their full consent that researchers commence the data gathering process to ensure that the full consent has been sought from the respondents prior to the conduct of the study and only those who are willing to participate will be taken as respondents of the study. The respondents were not subjected to harm in any way. The anonymity and protection of the privacy of individuals were ensured, and the disclosure of the names of the respondents were made optional. Data were treated with utmost confidentiality and is currently stored on vault of the College of Allied Health Sciences and will be kept for at least two years or as long as it is still useful in implementing programs and for the improvements and when there is an intention to use them further for research. Paper records will be shredded and burnt, and all records stored on a computer hard drive will then be deleted. Any types of communication in relation to the research will be done with honesty and transparency.

The confidentiality clause on the part of the respondents is duly protected by RA 10173 or otherwise known as the Data Privacy Act of 2012 stating that information given by the respondents will be used solely for the purpose

of this study and it can never be used against him/her in any legal battles or avenue and/or prejudice his/her personhood in his/her desire to participate in the data gathering for the success of this study.

Also, respondents were given the freedom to withdraw their participation in the study at any time without necessarily disclosing the reasons for withdrawal and penalty for such. No incentives were provided with respondents' participation in the study. However, compensation was given for their snacks, lunch and travel expense. The conduct of this study had not caused any form of distress among its respondents.

RESULT

Table 1.a shows the socio-demographic characteristics of the respondents. As a result, the majority are females, 253 (65.5%) and

Table 1.a

Socio-Demographic Profile of Respondents

Variables	Frequency	Percent
Sex		
Female	253	65.5
Male	133	34.5
Civil status		
Single	63	16.3
Married	298	77.2
Widow/er	20	5.2
Common Law Partner	5	1.3
Living status		
Alone	16	4.1
Living with Children, Spouse and Parents	64	16.6
Living with Children and Spouse	190	49.2
Living with Children Only	28	7.3
Living with Parents	40	10.4
Living with Other Family Members or Friends	45	11.7

married 298 (77.2%). To note, most of them live with their children and spouses 190 (49.2%). In particular, the majority are Ilocano 282 (73.1%) and Roman Catholic 319 (82.6%). Indeed, the age range is 26-55 years old. Nonetheless, the mean age is 43 (+ 11.8) years old.

Meanwhile, 248 (64.2%) of them are at least college graduates. To date, 199 (51.6%) are employed as BHERT. Generally, the median monthly income is 7,000 pesos. Surprisingly, the Local Government Units has a frequency count of 255 (66.1%). Regarding their employment status, 151 (39.1%) are permanent employees, while 264 (68.4%) are involved in indirect patient care during the CoViD-19 pandemic. Moreover, the median length of service is six (6) years. As to pieces of training and seminars on CoViD-19, 237 (66.40%) attended, while 149 (38.60%) otherwise.

	Living with Spouse Only	2	0.5
	Living with Common Law Partner	1	0.3
Ethnicity			
	Ilocano	282	73.1
	Ybanag	66	17.1
	Tagalog	59	15.3
	Ytawes	57	14.8
	Others	10	2.8
Religion			
	Non-Roman Catholic	67	17.4
	Roman Catholic	319	82.6
Highest educational attainment			
	Elementary	23	6.0
	High School	97	25.1
	Vocational/Technical	18	4.7
	College	190	49.2
	Graduate Studies	21	5.4
	Post Graduate Studies	37	9.6
Occupation			
	Doctor	32	8.3
	Nurse	60	15.5
	Medical Technologist	11	2.8
	Radiologic Technologist	6	1.6
	Respiratory Therapist	3	0.8
	Midwife	32	8.3
	Nursing Aide	22	5.7
	BHERT	199	51.6
	Ambulance Driver	4	1.0
	Janitor	5	1.3
	Security Guard	12	3.1
Employment status			

	Permanent	151	39.1
	Contract of Service	34	8.8
	Co Terminus	136	35.2
	Job Order	21	5.4
	Elected	44	11.4
Employment agency			
	Local Government Unit	255	66.1
	Government Hospital	131	33.9
Role during the pandemic			
	Indirect Patient Care	264	68.4
	Direct Patient Care	122	31.6
Age (in years)			
	20-25	12	3.1
	26-31	63	16.3
	32-37	63	16.3
	38-43	59	15.3
	44-49	61	15.8
	50-55	63	16.3
	56-61	38	9.8
	62-67	19	4.9
	68-73	7	1.8
	74-79	1	0.3
	Mean $\pm$ SD	43.4 $\pm$ 11.8	
	Median (Range)	43 (20-75)	
Income			
	Mean $\pm$ SD	16,473.5 $\pm$ 24469.4	
	Median (Range)	7,000 (0-200,000)	
Length of service			
	Mean $\pm$ SD	8.9 $\pm$ 8.7	
	Median (Range)	6 (0-41)	
CoViD-19 related seminars/trainings			

attended		
No	149	38.60
Yes	237	66.40
Total		386 100.0

Table 1.b displays the respondents' attendance to trainings and seminars. It shows that majority of both Community-based (BHERTs) (60.67%) and Hospital-based frontliners (14.56%) attended seminars as regards CoViD-19 Symptoms, Protocols and Minimum Public

Health Standards. Based on the table, it can be seen that nearly half of the Hospital-based respondents (47.09%) has not attended trainings and seminars in contrast with members of BHERT where only one-fourth (25.24%) of them has not able to attend the said undertaking.

Table 1.b
Trainings and Seminars Attended by Respondents

Trainings and Seminars	Organization			
	Community-Based Frontliner (BHERT)		Hospital-Based Frontliner	
	Frequency	Percentage	Frequency	Percentage
CoViD-19 Symptoms, Protocols and Minimum Public Health Standards	125	60.67	30	14.56
Contact Tracing	13	6.31	3	1.67
Proper Donning and Doffing of PPE	4	1.94	16	7.77
CoViD-19 Management	8	3.88	22	12.22
Orientation about Vaccine	3	1.46	6	2.91
Infection Control/ Prevention of Transmission	1	0.49	6	3.33
None	52	25.24	97	47.09
Total	206	100.00	180	100.00

Table 1.c shows the medical history of respondents. For the record, 245 (63.5%) have no known reports of comorbidities in the past two (2) years. However, data on comorbidities reveal that there are 101 (26.2%) cardiovascular diseases (e.g., hypertension, high cholesterol, mitral valve prolapsed), 24 (6.2%) respiratory diseases (e.g., asthma, lung disease,

tuberculosis), and 20 (5.2%) endocrine diseases (e.g., diabetes mellitus, gallbladder polyps, gallbladder stone, goiter, hepatitis, hepatitis B), respectively. Alarming, for the past two (2) years, the topmost health-related illnesses present among the family members of the respondents are 101 (26.2%) cardiovascular diseases (e.g., hypertension, high cholesterol,

mitral valve prolapsed), followed by 20 (5.2%) endocrine diseases (e.g., diabetes mellitus, gallbladder polyps, gallbladder stone, goiter, hepatitis, hepatitis B).

At large, 223 (57.8%) claim no close contact with the CoVid-19 patients. On the contrary, 163

(42.2%) have close contact, yet 144 (88.63%) underwent a swab test. To imply, 19 (11.66%) did not undergo swab test despite known exposure. Unfortunately, 19 (9.02%) tested positive; conversely, the rest were negative.

Table 1.c

Medical History of Respondents

Items	Frequency	Percent
Comorbidities or illnesses for the past 2 years		
Respiratory	24	6.2
Cardiovascular	101	26.2
Gastro-Intestinal	1	0.3
Genito-Urinary	6	1.6
Musculoskeletal	2	0.5
Endocrine	20	5.2
Immune Disorders	5	1.3
Blood Disorders	1	0.3
No Reported Comorbidity	245	63.5
Family Illnesses for the past 2 years		
Respiratory	41	10.6
Cardiovascular	197	51.0
Gastro-Intestinal	1	0.3
Genito-Urinary	6	1.6
Musculoskeletal	2	0.5
Endocrine	50	13.0
Immune Disorders	22	5.7
Blood Disorders	1	0.3
No Reported Comorbidity	146	37.8
Close contact with a CoViD-19 patient		
Yes	163	42.2
No	223	57.8
Total	386	100.0

Undergo swab test with closed contact			
Yes	144	88.34	
No	19	11.66	
Total	163.	100.0	
CoViD-19 positive			
Yes	13	9.02	
No	131	90.08	
Total	144	100.0	



- Cardiovascular Diseases (hypertension, high cholesterol, mitral valve prolapsed)



- Respiratory Diseases (asthma, lung disease, tuberculosis)



- Endocrine Diseases (diabetes mellitus, gall bladder polyps, gall bladder stone, goiter, hepatitis, hepatitis B)

Table 1.d

CoViD-19 quarantine procedures. To emphasize, 374 (96.9%) have "properly isolated all suspected, probable and confirmed CoViD-19 patients depending on the severity of symptoms". In comparison, 372 (96.6%) "adhere to stringent Minimum Public Health Standards

implementation of the following: physical distancing, hand hygiene, cough etiquette, and proper wearing of a mask". In contrast, non-compliance to "psychosocial counseling on CoViD-19" 26 (6.7%), and "adequate room for quarantine" 25 (6.5%) is observed.

Table 1.d

Agency's Compliance on CoViD-19 Quarantine Procedures

Items	NO		YES	
	Freq	%	Freq	%
Provided adequate room for quarantine	25	6.5	361	93.5
Adhered to stringent Minimum Public Health Standards on CoViD-19 Management System through the implementation of the following:				
a. Physical distancing	13	3.4	373	96.6
b. Hand hygiene	13	3.4	373	96.6
c. Cough etiquette	13	3.4	373	96.6
d. Proper wearing of mask	13	3.4	373	96.6
Properly isolated all suspected, probable and confirmed CoViD-19 patients depending on the severity of symptoms	12	3.1	374	96.9
Followed the desired number of days for quarantine prior to discharge	14	3.6	372	96.4
Provided psychosocial counselling on CoViD-19 quarantine	26	6.7	360	93.3

Table 2 demonstrates the respondents' practices during the CoViD-19 pandemic. Arising from several claims specifically, "Allowing health care workers to exercise the right to refuse rendering basic medical interventions to suspected CoViD-19 patients without proper PPE" 46 (11.9%), "Providing sufficient supply

of Personal Protective Equipment to those caring for suspected or confirmed CoViD-19 patients" 7 (1.8%), together with "Providing supportive interventions and assistance for signs of undue treatment by the public during CoViD-19 Pandemic" 5 (1.3%) respectively, are rarely performed.

Table 2

Respondents' Practices During COVID-19 Pandemic

Items	Never		Rarely		Sometimes		Often		Always	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Following strict self-assessment.	0	0.0	2	0.5	8	2.1	60	15.5	316	81.9
Following symptom reporting.	2	0.5	3	0.8	14	3.6	53	13.7	314	81.3
Following quarantine procedures/protocols.	0	0.0	1	0.3	10	2.6	43	11.1	332	86.0
Providing sufficient supply of Personal Protective Equipment to those caring for suspected or confirmed CoViD-19 patients.	3	0.8	7	1.8	37	9.6	81	21.0	258	66.8
Observing responsibility to ensure preventive and protective measures for CoViD-19 management.	2	0.5	2	0.5	9	2.3	58	15.0	315	81.6
Providing information, education, and training on occupational safety and health for CoViD-19 Pandemic.	0	0.0	2	0.5	22	5.7	71	18.4	291	75.4
Allowing health care workers to exercise the right to refuse rendering basic medical interventions to suspected CoViD-19 patients without proper PPE.	46	11.9	15	3.9	60	15.5	81	21.0	184	47.7
Providing supportive interventions and assistance for signs of undue treatment by the public during CoViD-19 Pandemic.	2	0.5	5	1.3	33	8.5	82	21.2	264	68.4
Reporting to immediate supervisor any situation that poses serious danger to life or health related to CoViD-19 infection.	2	0.5	0	0.0	4	1.0	63	16.3	317	82.1
Following established public health reporting procedures of suspected and confirmed cases of CoViD-19	0	0.0	2	0.5	7	1.8	56	14.5	321	83.2

Pandemic.

Providing appropriate protective measures as needed for personal safety during CoViD-19 Pandemic.	2	0.5	2	0.5	12	3.1	51	13.2	319	82.6
Maintaining the standard preventive measures on CoViD-19 Pandemic.	0	0.0	0	0.0	5	1.3	36	9.3	345	89.4

It is worth emphasizing that Quantile Regression was used to determine the relationship between the profile variables and low scores of practices of frontliners, as shown in Table 3.

Respondents living with someone manifest significantly higher practice scores compared to those living alone. Correspondingly, allied health professionals display better practice scores than non-allied health.

Living status ($p=0.0496$) and occupation ($p<0.001$) are factors influencing practices.

Table 3

Quantile regression results for Practices and profile variables

Parameter	Practices	
	Coefficient	Std. Error
Age	0.004	0.003
Education	0.022	0.025
Length of service	-0.003	0.003
Income	-1.068E-06	1.3685E-06
Comorbidity	0.033	0.041
Family illness	-0.039	0.031
Sex (female)	-0.032	0.050
Civil Status (w/o partner)	-0.067	0.059
Living status (with someone)	0.233*	0.118
Ethnicity (Ilocano & Tagalog)	-0.019	0.058
Religion (Roman Catholic)	0.010	0.061
Occupation (allied health)	0.366**	0.093
Employment status (permanent)	0.012	-0.076
Employment agency (local government unit)	0.008	-0.070
Role (indirect patient care)	0.059	0.074
Seminar attended	0.088	0.049

* $p<0.05$, ** $p<0.01$

DISCUSSION

During Covid-19 hard knocks, evidenced-based practices among frontliners seemingly made a resounding impact on **FREEDOM** "Allowing health care workers to exercise the right to refuse rendering basic medical interventions to suspected CoViD-19 patients without proper PPE", **CARE** "Providing sufficient supply of Personal Protective Equipment to those caring for suspected or confirmed CoViD-19 patients" and **PROTECTION** "Providing supportive interventions and assistance for signs of undue treatment by the public during CoViD-19 Pandemic". As a result, the criteria above were hardly practiced.

To further support the claim on "Allowing health care workers to exercise the right to refuse rendering basic medical interventions to suspected CoViD-19 patients without proper PPE", statements regarding COVID-19 Implementing Rules on Proper Wearing of Personal Protective Equipment (PPE) were quoted as follows: "...kailangan naka PPE talaga..." ["...you really need PPE..."] [SP11S02], "...ngayon naka PPE ka mag rounds at [magperform ng] procedure..." ["...now, you really have to wear your PPE when doing rounds and performing procedures..."] [SP13S01.2], and "...kahit mainit kailangan pa din naka face mask ka the whole time sa hospital..." ["... Even if it's hot, you still need to wear a face mask the whole time you're on duty in the hospital..."] [SP14S01.2.]

Fearlessness and determination among the health care workers are seemingly engraved with love and commitment. Controversially, frontliner's duty can be justified by giving credit to a person's independent judgment of accepting the nature of the profession regardless of the corresponding jeopardy. To note, frontliners have entirely adjusted to the scope of their practice that rolling over the sphere of highly contagious ailments is life-endangering (Johnson and Butcher, 2020). Despite all the reminders, the preservation of life lies significantly in the appropriateness of PPE and should generally be observed and practiced at all times (Chia et al., 2005). To summarize, this responsibility is an

embodiment of the professional healthcare workers codes of conduct (Damery et. al, 2010)

Correspondingly, "Providing sufficient supply of Personal Protective Equipment to those caring for suspected or confirmed CoViD-19 patients" was substantiated through participants' narratives on the insufficient supply of noncritical patient-care equipment to community-based frontliners, "Kulang sa gamit gaya nang face shield, face mask at PPE" ["Lack of equipment such as face shield, face mask and PPE"] [SP22S01], and "Kulang sa gamit [like] mask, face shield, alcohol, thermometer, and vitamins." ["Lack of equipment [like] mask, face shield, alcohol, thermometer, and vitamins."], [SP24S01]. This means that frontliners shall gain the spirit of security and positivism when proper and complete paraphernalia is provided. Personal Protective Equipment (PPE) is a cornerstone of security against SARS-CoV-2 (Cook, 2020). Therefore, to guarantee safety among frontliners, health and social care organizations should make coherent guidelines and policies in obtaining PPE. In the long run, to ensure availability, accessibility, and convenience in PPE stocks, the governing political authority should consider it a national policy (Grasseli et al., 2020)

Moreover, in reference to "Providing supportive interventions and assistance for signs of undue treatment by the public during CoViD-19 Pandemic" was barely granted as evidenced by the participants' existing narratives, "...mahirap ang work namin ngayong pandemic kulang sa tao, kulang sa supporta, pinandidirihan kami, discrimination kahit saan, sana matulungan kami..." ["... The nature of our job during this time of pandemic is really challenging, we lack manpower and support, some people even find us disgusting, we are discriminated everywhere, hopefully, help will be extended to us"] [SP35S01], and "...sometimes not supported by the barangay officials, buying my own medical supplies... [I] experienced discrimination..." ["... Sometimes we are not supported by the barangay officials, buying my own medical supplies... [I] experienced discrimination..."] [SP95S01]. Sadly, it unravels that frontliners' lives in the center of CoViD-19 ambivalence

experienced discrimination and support deprivation. As expounded by Corpuz 2021, the CoViD-19 pandemic's scope and hardness indicate public health danger. Ending the stigma, prejudice, harsh and ungrateful treatment against our frontliners is critical. Finally, the administration and society must provide comprehensive assistance among frontline healthcare professionals to stabilize an environment that shall enhance frontliners' protection during the COVID-19 crisis (Singh & Subedi, 2020).

Quantile Regression

The living condition and occupation of frontliners have a profound influence on their CoViD-19 prevention practices. Frontliners who are living with someone have significantly higher practice scores compared to those living alone. Hence, frontliners felt driven to enhance their efficiency by living with someone. As they say, family health is an important factor in regulating one's conduct (Kim & Kim, 2020b). Previous research revealed that a person's choice of cautious conduct is affected by the expression of genuine care from families and friends (Prati et al., 2010b). Furthermore, in a study conducted, people living with families showed better practices than those living alone. Information reveals that acceptable health practices must be religiously observed to ensure the safety of loved ones and those at risk (Jawed et al., 2020).

To note, allied health has better practice scores than non-allied health. Previous literature shows that good practices for the CoViD-19 outbreak are evident (Saqlain et al., 2020). Remarkably, Patient and Personal Protection Management is one of the major priorities of organized courses, training, webinars, and awareness programs by professional organizations and numerous medical institutions. It may appear that allied healthcare practitioners were well-versed and prepared for the Fundamentals of Infection Control Practices as part of their educational coursework. As explained by Hussain et al. 2020, the effective practices of primary healthcare practitioners can be associated with different government directives and community

education efforts done through social and digital communication (Hussain et al., 2020).

Household illness and work opportunities are referenced as significant barriers to frontliners. This can be justified predominantly via actual interplay between the allied health professionals and CoViD-19 victims, also when the disease is carried down through families with comorbidities. According to Ye et al. 2020, the CoViD-19 contamination has a higher risk of putting relatives in danger. Patients with underlying diseases have poorer overall health, giving rise to a lower resistance to most diseases. As a result, there are more barriers to disease prevention and treatment, and groups of frontliners are more likely to develop new diseases.

REFERENCES

- Amati V, Meggiolaro S, Rivellini G, Zaccarin S. Social relations and life satisfaction: the role of friends. *Genus*. 2018;74(1):7. PMID: 29755134; PMCID: PMC5937874. doi:10.1186/s41118-018-0032-z
- Cabrini, L., Grasselli, G., & Cecconi, M. (2020). Yesterday heroes, today plague doctors: the dark side of celebration. *Intensive Care Medicine*, 46(9), 1790-1791.
- Chia, S. E., Koh, D., Fones, C., Qian, F., Ng, V., Tan, B. H., ... & Lim, M. K. (2005). Appropriate use of personal protective equipment among healthcare workers in public sector hospitals and primary healthcare polyclinics during the SARS outbreak in Singapore. *Occupational and Environmental Medicine*, 62(7), 473-477.
- Colville, GA, Smith, JG, Brierley, J, Citron, K, Nguru, NM, Shaunak, PD, et al. Coping with staff burnout and work-related posttraumatic stress in intensive care. *Pediatr Crit Care Med*. 2017;18:e267–e73. doi:10.1097/PCC.0000000000001179
- Cook, T. M. (2020). Personal protective equipment during the coronavirus disease

- (COVID) 2019 pandemic – a narrative review. *Anaesthesia*, 75(7), 920–927. <https://doi.org/10.1111/anae.15071>
- Damery, S., Draper, H., Wilson, S., Greenfield, S., Ives, J., Parry, J., ... & Sorell, T. (2010). Healthcare workers' perceptions of the duty to work during an influenza pandemic. *Journal of medical ethics*, 36(1), 12–18.
- Department of Health (Philippines). (2019). Implementing Rules and Regulations of the Universal Health Care Act (Republic Act No. 11223).
- Dy, L. F., & Rabajante, J. F. (2020). A COVID-19 infection risk model for frontline health care workers. *Network Modeling Analysis in Health Informatics and Bioinformatics*, 9(1). <https://doi.org/10.1007/s13721-020-00258-3>
- Espiritu, A. I., Sy, M. C. C., Anlacan, V. M. M., & Jamora, R. D. G. (2021). COVID-19 outcomes of 10,881 patients: retrospective study of neurological symptoms and associated manifestations (Philippine CORONA Study). *Journal of Neural Transmission*, 128(11), 1687–1703.
- Evans, S., Mikocka-Walus, A., Klas, A., Olive, L., Sciberras, E., Karantzas, G., & Westrupp, E. M. (2020). From “It Has Stopped Our Lives” to “Spending More Time Together Has Strengthened Bonds”: The Varied Experiences of Australian Families During COVID-19. *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.588667>
- Hartley J, Jacobson D, Klandermans B, et al. *Job insecurity: coping with jobs at risk*. London: Sage Publications, 1991.
- Hussain, I., Majeed, A., Imran, I., Ullah, M., Hashmi, F. K., Saeed, H., Chaudhry, M. O., & Rasool, M. F. (2020). Knowledge, Attitude, and Practices Toward COVID-19 in Primary Healthcare Providers: A Cross-Sectional Study from Three Tertiary Care Hospitals of Peshawar, Pakistan. *Journal of Community Health*, 46(3), 441–449. <https://doi.org/10.1007/s10900-020-00879-9>
- Jawed, F., Manazir, S., Zehra, A., & Riaz, R. (2020). The novel Coronavirus disease (COVID-19) pandemic: Knowledge, attitude, practice, and perceived stress among health care workers in Karachi, Pakistan. *Medical Journal of The Islamic Republic of Iran*. Published. <https://doi.org/10.47176/mjiri.34.132>
- Johnson, S. B., & Butcher, F. (2020). Doctors during the COVID-19 pandemic: what are their duties and what is owed to them? *Journal of Medical Ethics*, 47(1), 12–15. <https://doi.org/10.1136/medethics-2020-106266>
- Lee, A., Kim, S. O., Gim, G. M., Kim, D. S., & Park, S. (2020). Care farming program for family health: A pilot study with mothers and children. *International Journal of Environmental Research and Public Health*, 17(1), 27.
- Mudrazija S, Angel JL, Cipin I, Smolic S. Living alone in the United States and Europe: the impact of public support on the Independence of older adults. *Res Aging*. 2020;42(5–6):150–162. PMID: 32116111. doi:10.1177/0164027520907332
- Organization for Economic Co-operation and Development. (2020). Who cares? Attracting and retaining care workers for the elderly.
- Prati, G., & Pietrantonio, L. (2010). The relation of perceived and received social support to mental health among first responders: a meta-analytic review. *Journal of Community Psychology*, 38(3), 403–417.
- Ramos, G. (2020). Women at the core of the fight against COVID-19 crisis. *OECD*
- Saqlain, M., Munir, M., Rehman, S., Gulzar, A., Naz, S., Ahmed, Z., Tahir, A., & Mashhood, M. (2020). Knowledge, attitude, practice and perceived barriers among healthcare workers regarding COVID-19: a cross-sectional survey from Pakistan. *Journal of Hospital Infection*, 105(3), 419–423. <https://doi.org/10.1016/j.jhin.2020.05.007>
- Schuster, M, Dwyer, PA. Post-traumatic stress disorder in nurses: an integrative review. *J Clin Nurs*. 2020;29:2769–87.
- Singh, R., & Subedi, M. (2020). COVID-19 and stigma: Social discrimination towards frontline healthcare providers and COVID-19 recovered

patients in Nepal. *Asian journal of psychiatry*, 53, 102222.

Van Dyne, L. & Ang, S. 1998. Organizational citizenship behavior of contingent workers in Singapore. *Academy of Management Journal*, 41: 692-703

Virtanen, P., Vahtera, J., Kivimäki, M., Pentti, J., & Ferrie, J. (2002). Employment security and health. *Journal of Epidemiology & Community Health*, 56(8), 569-574.

World Health Organization. (2011). The Philippines health system review.

Ye, C., Zhang, S., Zhang, X., Cai, H., Gu, J., Lian, J., Lu, Y., Jia, H., Hu, J., Jin, C., Yu, G., Zhang, Y., Sheng, J., & Yang, Y. (2020). Impact of comorbidities on patients with COVID-19: A large retrospective study in Zhejiang, China. *Journal of Medical Virology*, 92(11), 2821–2829. <https://doi.org/10.1002/jmv.26183>

Zamanzadeh, V., Ghahramanian, A., Rassouli, M., Abbaszadeh, A., Alavi-Majd, H., & Nikanfar, A. (2015). Design and Implementation Content Validity Study: Development of an instrument for measuring Patient-Centered Communication. *Journal Of Caring Sciences*, 4(2), 165-178. doi: 10.15171/jcs.2015.017