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FORTIFYING AND IMPLEMENTING THE SAFETY PROTOCOLS IN TIMES OF COVID-19

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Abstract: This research assessed the perceptions of the respondent groups on the level of safety measure and protocols implemented in times of covid-19 pandemic during the calendar year 2020. Most problems perceived in this time of pandemic was poor governance and strategy. If strategy and governance are important factor in health and safety, then it is important to understand the level of safety measures and protocols as perceived by the employees and administrators. The study also explores the relevant information of the respondents as to age and gender, educational attainment, years of service and status of employment. Moreover, this study utilized the descriptive methods of research, using appropriate statistical tool, the results were treated using mean, percentage and t-test for significant mean difference of the respondent groups. Based on the findings, data shows that workplaces have limitations of current testing capabilities especially in for screening symptoms of COVID-19 and employers in all sectors may experience shortages of PPE and washing area. Data suggest that the management who implement workplace testing strategies should act cautiously on COVID-19 test results. Employers should not presume that individuals who test negative for COVID-19 present no hazard to others in the workplace while protecting the outright termination of service and mitigate the effect of income loss of the employees, their safety against COVID-19 should be prioritized. Overall, the findings show that there was still a need for the local establishment to elevate its safety measures and protocols.

Keywords: Safety protocols, Covid-19, Administrative Controls, Engineering Controls

1. Introduction

COVID-19 is a rapidly mobile and dangerous disease. Patients may present with fever, and non-specific pneumonia may or may not have tested positive for the virus (Gorbalenya et al., 2020). The first confirmed COVID-19 case was found in Wuhan, China in December of 2019, and it is on the rise elsewhere. On March 9, 2020, COVID

will cover seven continents and will be based in over one hundred countries, with a total of 113,702 cases and 4,012 recorded deaths (Lai et al., 2020). Moreover, on the 11th of March 2020 marked the day on which the WHO proclaimed the COVID-19 pandemic status, and it represents a major threat to the general population. Studies suggest social movements had a powerful impact on the transmission of infectious diseases. Since COVID and other forms of cytomegaloviridae (variants of CMV) are increasingly circulating across the world, state and local governments have adopted public health initiatives and strategies to mitigate its arrival in the population.

Based on current evidence, the COVID-19 virus is transmitted between people through close contact and droplets (Wax & Christian, 20209). The people most at risk of infection are those who are in close contact with a COVID-19 patient or who care for COVID-19 patients. Healthcare workers are at significant risk of acquiring the infection; therefore, they are required to protect themselves and prevent transmission in the healthcare setting. Precautions to be implemented by healthcare workers caring for patients with COVID-19 include using appropriate personal protective equipment (PPE). The World Health Organization (WHO) and other national and international public health authorities recommend implementing safety protocols for healthcare workers (WHO, 2020). However, basic protective equipment and safety protocols are not always available in many medical institutions dealing with COVID-19 patients According to the Pan American Health Organization (PAHO) and the WHO, the number of confirmed cases in Latin America is 26,486, and the number of deaths is 858 as of April 4, 2020. Unfortunately, there is a significant discrepancy in regards to access to PPE, human resources, and healthcare policies in countries in the region of the Americas. The speed with which COVID-19 is spreading across the word calls for an assessment of the reality of healthcare workers exposed to COVID-19 patients.

Moreover, during the initial weeks and months of the COVID-19 crisis, G20 countries moved rapidly to provide unprecedented levels of emergency support to keep households and companies afloat, protect jobs and incomes and prevent the economy from collapsing. In the coming months, as the peak of the COVID-19 pandemic subsides and G20 countries increasingly turn to re-opening their economies, policymakers will need to maintain this agility, modifying and adjusting the composition and characteristics of support packages, targeting support where it is needed most, and encouraging a return to work where possible. While doing that, it will be important to start on the task of building back better to address the deep-rooted labor market fragilities and structural inequalities that the pandemic has exposed (ILO, 2020).

WHO (2020) emphasized that COVID-19 spreads primarily through respiratory droplets or contact with contaminated surfaces. Moreover, exposure can occur at the workplace, while travelling to work, during work-related travel to an area with local community transmission, as well as on the way to and from the workplace. Further, the risk of exposure to COVID-19 in the workplace depends on the likelihood of coming within 1 meter of others, in having frequent physical contact with people who may be infected with COVID-19, and through contact with contaminated surfaces and objects.

Hence, the pandemic has exposed deep-rooted labor market fragilities and structural inequalities, with low-paid workers, young people, women, ethnic minorities, the self-employed and informal and fixed-term workers among the hardest hit by the crisis. Thus, policymakers must begin to think beyond policies for the recovery and start on the task of building a future of work that is safer, fairer, greener and more effective in cushioning the consequences of future crises on jobs and incomes. "Building back better" calls for increased policy coherence, in particular between economic, employment and social policies and a whole of-society approach. It also

Korret et al., (2022). Fortifying and Implementing the Safety Protocols in Times of Covid-19. Copyright (c) 2022. Author (s). This is an open term of Creative Commons Attribution License (CC BY). www.wjehr.com requires that support reaches those most in need and that improving the situation of the most disadvantaged and vulnerable groups in the labor market receives the highest attention to avoid a further rise in inequalities. (ILO.2020).

In addition, World Bank (2020) noted that COVID-19 causes unprecedented jobs crisis, almost all workers and businesses affected by lockdown measures. For employees in many organizations, this is a time of great uncertainty. COVID-19 is changing the way people work, with travel bans, skeleton crews, remote work, and social distancing becoming the new norms. In many organizations, these new ways of working are raising questions and concerns. To gain a better understanding of what employees are thinking, Remesh and Mercer Sirota partnered together to conduct an online focus group in mid-March with a convenience sample of 256 employees working in small, medium, and large organizations. Their finding shows that 9 out of 10 employees are concerned about COVID-19 and employees want support for their financial, physical, and psychological wellbeing during this health crisis.

Measures for protecting workers from exposure to and infection with SARS-CoV-2, the virus that causes Coronavirus Disease 2019 (COVID-19), depends on exposure risk. That risk varies based on the type of work being performed, the potential for interaction (prolonged or otherwise) with people, and contamination of the work environment. Employers should adopt infection prevention and control strategies based on a thorough workplace hazard assessment, using appropriate combinations of engineering and administrative controls, safe work practices, and personal protective equipment (PPE) to prevent worker exposures. Some OSHA standards that apply to preventing occupational exposure to SARS-CoV-2 also require employers to train workers on elements of infection prevention and control, including PPE (UDL,2020). The purpose of this study was to evaluate the reality and perceptions about personal safety among government workers in the fiscal year 2020.

2. Purpose of the Study

This research assessed the status of implementation of safety protocols in identified establishment. The level of implementation of safety protocols in terms of the: health and safety protocols, administrative controls, engineering controls and available PPE and the issues and concerns relating to safety protocols were considered in the main problem of the study.

3. Research Methodology

This study employed a descriptive method research design utilizing quantitative approaches to determine the level of satisfaction of the respondent groups relating to safety protocols inside the establishment. This research included the Input-Process-Output approach. The input Included the Levels of satisfaction in terms security measures, safety measures, administrative controls, engineering controls, and identify and available PPE. The process considered the administration of questionnaire, data consolidation, presentation, analysis and interpretation using statistical software. The output of the study is the proposed output. The respondents were taken for purposive sampling. The instrument used is a researcher-formulated questionnaire guide based in consonance with the different sub-problems. Some modifications of the aforementioned interview guide were made to suit the informants. The items of the survey questionnaires in the demographic profile were a researcher made and the main questionnaire was anchored on the study of Wong et al. (2020) and United States

Department of Labor control and prevention survey questionnaire. The general guidance in the questionnaire is meant to inform all workers and employers, but does not alter compliance responsibilities for any particular industry. Depending on where their operations fall in OSHA's exposure risk pyramid, workers and employers should also consult additional, specific guidance for those at either lower (i.e., caution) or increased (i.e., medium, high, or very high) risk of exposure.

4. Results and Discussions

	Employees			Administrators				
	Gen	der	Tot	tal	al Gender		Т	otal
Age	М	F	f	%	М	F	f	%
50 above	2	2	4	8	0	0	0	0
46-50	6	0	6	12	0	4	4	80
41-45	4	8	12	20	0	1	1	20
36-40	5	13	18	38	0	0	0	0
31-35	2	8	10	15	0	0	0	0
Below 30	2	1	3	6	0	0	0	0
Total	21	26	50	100	0	5	5	100

Table 1. Age and Gender

Table 1 presents the distribution of the respondents' according to age and gender. The data shows that out of 50 employee respondents, twenty-six (26) or 52% were female and twenty-one (21) or 48% were male. Fifteen (15) or 32% were in the age group of 36-40, followed, twelve (12) or 26% were in the age group of 41-45, ten (10) or 15% were ages 31-35, six (6) or 12% were in the age group of 46-50, four (4) or 8% were in the age group of 50 above and three (3) 0r 6% where in the age group of below 30. This indicates that the employees were middle aged adults. On the other hand, the data shows that out of five (5) administrator respondents, all of them are female and four (4) or 80% were in the age group of 46-50 years old and one (1) or 20% was in the age group of 41-45 years old. This indicates that the administrators are mostly in the middle-aged adults.

Highest Educational Attainment	Emplo	oyees	Administrator		
	f	(%)	f	%	
Doctor Degree	0	0	3	60	
Doctor with units	0	0	2	40	
Master Degree	4	8	0	0	
Master with units	7	14	0	0	
Bachelor Degree	39	78	0	0	
Total	50	100	5	100	

 Table 2. Highest Educational Attainment

The table 2 shows the educational attainment of the respondents. Data gathered shows that thirty-nine (39) or 78% were bachelor degree holder, followed by seven (7) or 14% have units in master and four (4) or 8% were master degree holder. On the other hand, three (3) or 60% of the administrator respondents have doctor degree and two (2) or 40% have units in doctoral. Study conducted by Raghupathi and Raghupathi (2020) revealed that adults with higher educational attainment have better health and lifespans compared to their less-educated peers. Gyekye and Salminen (2009) added that higher

level of education will therefore promote strategic thinking' levels of education would be positively correlated with their safety and preventive behaviors, and inversely related to their accident involvement rate, the higher-educated workers tend to possess greater skills which broaden their work responsibilities, and thereby increase their accident potential.

	Employees		Admii	nistrator
Years of Service	f	%	f	%
31 above	0	0	0	0
26-30	0	0	0	0
21 - 25	4	8	2	40
16-20	7	15	2	40
11-15	9	20	1	20
6-10	17	32	0	0
1-5	13	25	0	0
Total	50	100	5	100

Table 3. Years of Service

Table 3 shows the years of service of the respondents. Data shows that seventeen (17) or 32% were in 6-10 years in service, followed by thirteen (13) or 25% were in the service of 1-5 years, nine (9) or 20% were in the service 11-15 years, seven (7) or 15% were in the service of 16-20 years, and lastly four (4) or 8% were in the service of 21-25 years. On the other hand, two (2) 0r 40% of the administrators were in the service of 21-25 years, two (2) or 40% were in service of 16-20 years and one (1) or 20% was in the service of 11-15 years.

	Employees		Admir	nistrator
Employment Status	f	%	f	%
Regular	32	64	5	100
Casual	8	16	0	0
Job Order	6	12	0	0
Contractual	0	0	0	0
Temporary	4	8	0	0
Total	50	100	5	100

Table 4. Employment Status

Table 4 shows the years of service of the respondents. Data shows that thirty-two (32) or 64% were in regular employment status followed by eight (8) or 16% were in casual employment status, six (6) or 12% were in job order employment status, and lastly four (4) or 8% were in temporary employment status. On the other hand, five (5) or 100% of the administrators were in regular employment status. Studies of Goodman 2015 reveals that employment increases health status. This indicates that employment increases economic hardship which creates stress and generates psycho-physiological distress, malaise and susceptibility to diseases.

Table 1 shows the perception of employees and administrators' level of satisfaction in terms of health and safety protocols. Data shows that the statement refers to safety protocols being implemented to prevent COVID-19 infections at work got the highest weighted mean of 3.28 which verbally described as moderately agree while, the statement refers to screening

employees for symptoms of COVID-19 got the lowest weighted mean of 2.88 which verbally described as moderately agree.

Health and Safety Protocols	Employees		Administrator	
	Mean	VD	Mean	VD
Safety protocols being implemented to prevent COVID-	3.28	MA	3.39	MA
19 infections at work.				
Strictly follow and implement guidelines on infection	3.15	MA	3.16	MA
control procedures				
Temperature check upon entering the work place.	3.25	MA	3.10	MA
Screening employees for symptoms of COVID-19.	2.88	MA	3.06	MA
Provide adequate access to first aid.	3.12	MA	3.08	MA
Provide adequate means of transportation from home to		MA	3.20	MA
work and vice versa.				
Grand Mean	3.14	MA	3.17	MA

Table 5. Health and Safety Protocols

This indicates that workplaces should have a comprehensive program to monitor worker health during the pandemic and tighten their screening efforts to be most beneficial for individual in the workplace. Administrators' response on the other hand, safety protocols being implemented to prevent COVID-19 infections at work got the highest weighted mean of 3.39 which verbally described as moderately agree while the statement refers to screening employees for symptoms of COVID-19 got the lowest weighted mean of 3.12 which verbally described as moderately agree. This indicates that detection of disease at early stage or screening for COVID-19 symptoms is seldom practiced in the company. This entails that company owners should place significant weight on symptoms screening as a whole versus temperature in determining for early detection of disease and each employee and administrator has the responsibility to keep the workspaces safe and healthy, and accountable for the health and wellbeing of everyone.

Administrative Controls	Employees		Administrator	
	Mean	VD	Mean	VD
Posting signage, in languages the workers understand, to	3.52	А	3.12	MA
remind workers, customers, and visitors to maintain a				
distance of at least 6 feet between one another.				
Increasing the frequency of cleaning and disinfection within	3.25	MA	3.35	MA
the work site.				
Providing training and information in languages the workers	3.12	MA	3.55	Α
understand.				
Adopt an appropriate alternative work arrangement	3.63	Α	3.05	MA
Strictly adhere to guidelines on the implementation of	3.12	MA	3.45	Α
community quarantine				
Limiting the number of workers assigned to a particular shift	3.27	MA	3.25	MA
in a facility and ensuring workstations are spaced at least 6				
feet apart.				
Grand Mean	3.31	MA	3.30	MA

Table 6. Administrative Controls

Table 6 shows the perception of employees and administrators' level of satisfaction in terms of administrative controls. Data shows that the statement refers to Adopt an appropriate alternative work arrangement got the highest weighted mean of 3.63 which

verbally described as agree while, the statement refers to providing training and information in languages the workers understand and strictly adhere to guidelines on the implementation of community quarantine got the lowest weighted mean of 3.12 which verbally described as moderately agree. This indicates that adhering to the guidelines can be achieved if the employees understand the language used which is necessary to evaluate new information and contextualize what the employees were being told, and evaluate it from many angles. Administrators' response on the other hand, statement refers to strictly adhere to guidelines on the implementation of community quarantine got the highest weighted mean of 3.45 which verbally described as agree while the statement refers to adopt an appropriate alternative work arrangement got the lowest weighted mean of 3.05 which verbally described as moderately agree. This indicates that flexible work arrangement was adopted to prioritize the employee's safety in the workplace and were needed as coping mechanism to ensure employees safety to COVID-19 and alternative than outright termination of service of the employees and mitigate the effect of income loss of the employees.

Engineering Controls	Emplo	oyees	Admini	strator
	Mean	VD	Mean	VD
Installing plexiglass, stainless steel, or other barriers	3.16	MA	3.36	MA
between workers, such as on assembly lines, or between				
workers and customers, such as at points of sale.				
Using rope and stanchion systems to keep customers from	2.82	MA	3.20	MA
queueing within 6 feet of work areas.				
Adjusting ventilation systems to introduce additional	3.02	MA	3.16	MA
outside air and/or increase air exchange to introduce fresh				
air.				
Modifying physical workspaces to increase the distance	3.27	MA	3.08	MA
between employees.				
Increase telecommunicating means of communication.	3.54	Α	3.10	MA
Improvise sanitation machine for employees inside the	3.12	MA	3.16	
establishment.				
Employees were protected against exposure to human	3.28	MA	3.04	MA
blood, body fluids, other potentially infectious materials				
as well as hazardous chemicals and contaminated				
environmental surfaces that may lead to covid virus.				
Grand Mean	3.17	MA	3.15	MA

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Table 7 shows the perception of employees and administrators' level of satisfaction in terms of engineering controls. Data shows that the statement refers to increase telecommunicating means of communication got the highest weighted mean of 3.63 which verbally described as agree while, the statement refers to using rope and stanchion systems to keep customers/visitors from queuing within 6 feet of work areas got the lowest weighted mean of 2.82 which verbally described as moderately agree. This indicates that employers should increase focus on protecting waiting customers and the employees who serve them. Workplace should be provided with queuing and barrier solutions that keep customers and workers safe, organized, and moving efficiently while maintaining the social distancing requirement during the pandemic. Administrators' response on the other hand, statement refers to installing plexiglass, stainless steel, or other barriers between workers, such as on assembly lines, or between workers and customers, such as at points of sale got the highest weighted mean of 3.36

Korret et al., (2022). Fortifying and Implementing the Safety Protocols in Times of Covid-19. Copyright (c) 2022. Author (s). This is an open term of Creative Commons Attribution License (CC BY). www.wjehr.com which verbally described as moderately agree while the statement refers to employees were protected against exposure to human blood, body fluids, other potentially infectious materials as well as hazardous chemicals and contaminated environmental surfaces that may lead to COVID-19 virus got the lowest weighted mean of 3.04 which verbally described as moderately agree.

Available PPE	Emplo	yees	Administrator		
	Mean	VD	Mean	VD	
Face shields	3.2 3	Α	3.52	Α	
Hand sanitizer	4.62	SA	4.61	SA	
Shoe covers	3.08	MA	3.14	MA	
Disposable gloves	3.21	Α	3.62	Α	
Additional handwashing areas	2.36	MA	3.02	MA	
Plexiglass barriers between co-workers	4.02	Α	4.25	SA	
Overall Mean	3.42	A	3.69	A	

Table 8. Available PPE

Table 8 shows the perception of employees and administrators' level of satisfaction in terms of Available PPE. Data shows available PPE refers to hand sanitizer got the highest weighted mean of 4.62 which verbally described as strongly agree while, additional hand washing areas got the lowest weighted mean of 2.36 which verbally described as moderately agree. This indicates there is a need for the company to add additional washing area for the employees to wash their hands regularly. Hand hygiene is the easiest, affordable and effective way to prevent employees from getting sick and reducing the spread of germs and virus such as COVID-19 in the workplace. Administrators' response on the other hand, available PPE refers to hand sanitizer got the highest weighted mean of 4.61 strongly agree while available PPE refers to additional hand washing areas got the lowest weighted of 3.0 which verbally described as moderately agree. This indicates that since washing area is very limited the employees and administrators tend to use hand sanitizer to clean their hands. According to the Centers for Disease Control (CDC), washing hands with soap and water is preferable to sanitizing gel. However, hand sanitizing is at least 60% can be effective as long as someone uses it properly. This implies that hand washing is a revolutionized medicine, adding additional hand washing area plus hand sanitizing as available PPE in the workplace can ensure better safety and health protection of the employees against COVID-19.

Source of Difference	Mean	n	Std dev	Z	p-value
Administrators	3.33	5	0.87	1.96	0.0016**
Employees	3.26	50	0.91		

Table 9. Test of Significant Difference

Table 9 shows the significant difference of the perception of the respondents on the extent of the safety measures in times of Covid-19 pandemic. Data shows that data is significant at 0.05, this indicates that the null hypothesis was reject, hence, there is a significant difference on the respondent groups perceptions.

5. Conclusion

Based on findings, efforts to exclude potentially infectious individuals from the workplace are consistent with the aim of eliminating the hazard. Employers adopted COVID-19 prevention and control strategies using appropriate combinations of engineering and administrative controls, health and safety protocols, and personal protective equipment (PPE) to prevent worker exposures against the virus. Similarly, data shows workplaces have limitations of current testing capabilities especially in for screening symptoms of COVID-19 and employers in all sectors may experience shortages of PPE and washing area. Data suggest that the employers who implement workplace testing strategies should act cautiously on COVID-19 test results. Employers should not presume that individuals who test negative for COVID-19 present no hazard to others in the workplace while protecting the outright termination of service and mitigate the effect of income loss of the employees, their safety against COVID-19 should be prioritized.

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