

Awareness and Practice of Personal Protective Equipment use during Covid-19 among Health Care Personnel in India: A Systematic Review

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Abstract

Background: Personal protective equipment (PPE) is the most insightful concern for frontline healthcare providers for the treatment of patients with coronavirus disease (COVID-19), to avoid transmission. The average person with COVID-19 infection is known to infect 1, 5 to 3, 5 people. The capacity of an entire hospital to be significantly diminished by a single COVID-19 infection of healthcare staff. Many health care personnel do not know what is safe to wear. With a growing number of doctor's fatalities, we aimed at increasing awareness and practice of health care personnel on the issues across the use of PPE by evaluating their awareness and practice using a validated questionnaire. Methodology: The research approach used is quantitative; this is because the data obtained is a quantifiable data. The information collected is from sampling methods from an online validated questionnaire. Methodology: The research approach used is quantitative; this is because the data obtained is a quantifiable data. The information collected is from sampling methods from an online validated questionnaire.

Index terms— Awareness, Practice, COVID-19 Pandemic, Protective Personnel Equipment [PPE], Health Care Personnel.

Introduction n 11th March 2020 the World Health Organization declared the COVID-19 outbreak a public health emergency of international concern 1, 2. The outbreak started in mainland China in the 2003 extreme acute respiratory syndrome (SARS) and 2012 Middle East respiratory syndrome (MERS), which strongly suggests the virus' droplet transmission and contact transmission 7, 8. In addition to the standard respiratory disorder, less common features such as diarrhea, nausea, vomiting, and abdominal pain have been reported in different degrees and different sample populations. 9 Transmission by droplets occurs when a person is in close contact (within 1 meter) with another person who has developed respiratory symptoms (coughing or sneezing) due to infection with COVID-19 and is thus at risk of exposure of his/her mucosa (mouth and nose) or conjunctiva (eyes) to potentially infectious respiratory droplets (generally known to be greater than 5-10 μm). Droplet transmission can also occur near the infected individual, via fomites (clothes, utensils, furniture, stethoscope, thermometer, etc. 10, 11 India registered the first COVID-19 case in Kerala on 30 January, which grew to three cases by 3 February; all were students who had returned from Wuhan. Apart from these, there was no noticeable change in transmissions in February. On 4 March 22 new cases, including 14 infected members of an Italian tourist party were reported. 12 In March, after many people with travel experience to affected countries, the transmissions increased, and their contacts tested positive. A 76-year-old man with a travel background to Saudi Arabia on 12 March became India's first COVID-19 fatality. A Sikh preacher, who had a travelling history to Italy and Germany, turned into a "mega spreader" by attending a Sikh festival in Anandpur Sahib on 10-12 March. Twenty-seven COVID-19 cases were traced back to him. More than 40,000 people were quarantined on Around 4,000 stranded pilgrims returned from Hazur Sahib in Nanded, Maharashtra. on 2 May in Punjab, many of them tested

1 NEED FOR STUDY

44 positive, including 27 bus drivers and drivers who had been part of the scheme for transport. On 13 May 1,225
45 pilgrims had been tested positive . 17 A popular subject -perhaps the most thought about, and emotive issue for
46 front-line treatment professionals dealing with Coronavirus Disease Patients (COVID-19) -is a personal protective
47 system (PPE). During the 2019 Corona Virus Pandemic (COVID-19), a lengthy and rising list of health care
48 workers has lost their lives . 18 . At the beginning of the outbreak, a significant proportion of health care staff
49 became infected, probably secondary to a lack of awareness and inadequacy of personal protective equipment
50 (PPE). For several nations throughout Europe, debates have started about how to optimally secure health care
51 personnel. Coronavirus COVID-19 has travelled across the globe impacting public care services 19 . There are
52 various recommendations for the protection of health care workers in each country or hospital. Nevertheless, no
53 concrete standards for personal protective equipment (PPEs) and health protocols in the area of medicine have
54 yet been created 20 15 Arora P, Kumar H, Panigrahi BK. Prediction and analysis of COVID-19 positive cases
55 using deep learning models: A descriptive case study of India. *Chaos, Solitons & Fractals* 2020;110017. 16 Zaenuri
56 A. KONSEPSI FIKIH DAKWAH JAM?'AH TABL?'GH PADA MASA PANDEMI COVID-19: Telaah Gerakan
57 Dakwah Jam?'ah Tabl?'gh Gorontalo. *JIL J Islam Law* 2020; 1:1-23. 17 Sidor A, Rzymiski P. Dietary Choices
58 and Habits during COVID-19 Lockdown: Experience from Poland. *Nutrients* 2020; 12:1657. 18 . Health care
59 practitioners should be trained and supported optimally from the guidelines. The average person with COVID-19
60 infection is known to infect 1, 5 to 3, 5 people. The capacity of an entire hospital to be significantly diminished
61 by a single COVID-19 infection of healthcare staff. About 1300 health workers were contaminated in Wuhan, the
62 outbreak area. More than 200 doctors have died of the illness in Italy to this day 21 . The likelihood of infection
63 is more than three times the general population for health workers. Both healthcare staff is commonly known
64 to wear standard surgical masks during any patient encounters. Also, the correct hand hygiene and disinfection
65 are suggested to avoid excessive touch, preserve adequate space. Positive or suspicious patients with COVID-19
66 are isolated from non-infected patients in most hospitals ??, 2 , 22 There are a wide range of personal protective
67 equipment (PPEs) globally varying from strong respiratory purifiers (PAPRs) to different facemasks, helmets,
68 gowns, and gloves 20, . 23 . Epidemics of severe acute respiratory syndrome coronavirus 2003 (SARS-CoV-1) or
69 Middle East Respiratory Syndrome Corona Virus (MERS) have historically occurred in countries (e.g., China,
70 Taiwan, and South Korea), where suits for PAPR and Hazmat are available. Some of the most impressive value
71 of PAPR is the re-usability of aerosol producing medical procedures (AGMPs), thus giving them safety . 18,22,24
72 Covering more of the body leads to better protection. Though, this may contribute to additional exposure as
73 it is generally correlated with greater difficulties in placing and extracting the personal protective equipment
74 (PPEs) because the PPE becomes less easy .Covers are the worst to remove which provide the greatest security,
75 accompanied by long skirts, skirts, and aprons. Respirators use with coverings can have more security than a
76 cloth-covered mask, but are easier to use. Airier personal protective equipment (PPE) forms can contribute to
77 identical pollution rates but can be rendered more comfortable. Coronavirus disease is predominantly transmitted
78 by contact or droplet transmission. Coronavirus disease can become aerosolized by 'aerosol-generating procedures'
79 and then the airborne transmission is possible ??,2,20 25 For certain countries, the lack of personal protective
80 equipment (PPE) has contributed to healthcare workers being vulnerable to probable . 21 Meier K, Glatz T,
81 Guijt MC, Piccininni M, van der Meulen M, Atmar K, et al. Public perspectives on protective measures during
82 the COVID-19 pandemic in the Netherlands, Germany and Italy: A survey study. *PLoS One* 2020;15: e0236917
83 22 Wang J, Zhou M, Liu F. Reasons for healthcare workers becoming infected with novel coronavirus disease
84 2019 (COVID-19) in China. *J Hosp Infect* 2020; 105:100-1. <https://doi.org/10.1016/j.jhin.2020.03.002>. 23 Jh
85 V, Jh R, Fs KB. Verbeek JH, Rajamaki B, Ijaz S, Sauni R, Toomey E, Blackwood B, et al. Personal protective
86 equipment for preventing highly infectious diseases due to exposure to contaminated body fluids in healthcare
87 sta (Review). 2020; 4:1-147. <https://doi.org/10.1002/14651858.CD011621.pub4>.www.cochraneflibrary.com. 24
88 Jain VK, Iyengar K, Vaish A, Vaishya R. Differential mortality in COVID-19 patients from India and western
89 countries. *Diabetes Metab Syndr Clin Res Rev* 2020 25

1 Need for Study

91 . The usage of personal protective equipment (PPE) in emergency operations created questions regarding its
92 impact on surgical performance, sense of safety, non-technical efficiency, general comfort, and surgical exhaustion
93 1 .

94 Personal protective equipment (PPE) is only one part of a system to protect staff and other patients
95 from COVID-19 transmission. Personal protective equipment (PPE) recommendations from international
96 organizations are broadly consistent; personal protective equipment (PPE) use is not. Appropriate use of Personal
97 protective equipment (PPE) significantly reduces the risk of viral transmission and infection. Personal protective
98 equipment (PPE) should be matched to the potential mode of viral transmission -contact, droplet, or airborne.
99 Many health care personnel do not know what is safe to wear 21 With a growing number of doctor's fatalities,
100 we aimed at increasing awareness and practice of health care personnel on the issues across the use of PPE by
101 evaluating their awareness and practice using a validated questionnaire.

102 ? In epidemics of highly infectious diseases, such as Ebola Virus Disease (EVD) or Severe Acute Respiratory
103 Syndrome (SARS), healthcare workers (HCW) are at much greater risk of infection than the general population,
104 due to their contact with patients' contaminated body fluids. Verbeek et el 2019 ? Lack of awareness and

105 proper practice regarding the use of PPE can lead to hazard known as occupational hazard caused by improper
106 negligence

107 The need for the use of these PPEs has increased over the years with increasing awareness of workplace hazards,
108 and the difficulties associated with overdependence on other control measures which for some agents cannot be
109 eliminated or even monitored. This is especially important in hospital settings where workers are often exposed
110 to biohazards and other infectious agents like hepatitis B, hepatitis C, and HIV. Indeed, health facilities are
111 rife with very hazardous agents: just recently COVID-19 disease, Lassa fever, and other infections caused high
112 mortality among health workers in the affected countries in India and subregion. Control of Coronavirus has
113 become particularly difficult and several measures including the use of appropriate PPEs were used to contain
114 it. Apart from biohazards, in hospitals, some departments work on radioactive materials (radiology department)
115 and others that work on both biohazards and chemicals (laboratory department). Some hospitals have therefore
116 established policies on PPE. 4 Nosocomial infections transmitted by direct contact can be prevented by adapting
117 standard precaution guidelines. Appropriate use of PPE is the easiest way to prevent contact from secretions
118 and transfer of pathogens which is mainly the mode of transmission of COVID-19. It's important to assess the
119 level of compliance with the use of PPE by various HCWs who make direct contact with COVID-19 patients.
120 Based on the available evidence, the COVID-19 virus is transmitted between people through close contact and
121 droplets, though further studies are being carried out to know whether it is airborne. The people most at risk of
122 infection are those who are in close contact with a COVID-19 patient or who care for COVID-19 patients, hence
123 this study attempted 7 .

124 IV.

125 2 Aim

126 This study aims to evaluate the awareness and the practice of personal protective equipment use during COVID-19
127 among health care personnel.

128 V.

129 3 Objectives

130 To determine the level of awareness among health care personnel on the use of PPE To evaluate the practice
131 in the use of PPE among health care workers Hypothesis H1=There will be a significant correlation between
132 awareness and practice of use of PPE among health care workers.

133 H0=There will be no significant correlation between awareness and practice of use of PPE among health care
134 workers in the treatment of COVID-19.

135 4 VI.

136 5 Methodology a) Search Strategy

137 The method of review is based on the PRISMA 27 27 Kublashvili K, Tsikarishvili K, Uriadmkopeli K, Kobalia
138 S. EDITORIAL format (preferred reporting item for systematic reviews and meta-analysis). In the search for
139 the topic, using google scholar search engine, from the identified keywords. Such as awareness, the practice of
140 PPE, COVID-19, and health care personnel. It was decided that all and at most three out of five keywords to be
141 used in the search for the articles related. As two researchers were consulted for the review, the first researcher
142 worked on the literature search and the second on the technical aspect which was the extraction of articles. The
143 initial search after entering of the title (Awareness and practice of PPE use during among health care personnel
144 "Personal Protective Equipment COVID 19") produced 16,900 results of which custom range was applied to
145 capture current data with 5 years, from 2016 to August 2020 and this yielded 8, 070 results. On observation
146 of the articles, several of them did not match the search criteria. Therefore, an advanced search was applied to
147 narrow down the subject and be more specific. The advanced search was applied "with all the words", "Personal
148 Protective Equipment COVID 19", with words occurring anywhere in the article and dated between 2016 till
149 2020 were reviewed and it resulted in twenty-five articles, sorted by relevance.

150 6 b) Research Approach

151 The research approach used is quantitative; this is because the data obtained is a quantifiable data. The
152 information collected is from sampling methods from an online validated questionnaire.

153 7 c) Research Design

154 A longitudinal cohort study in a form a prospective study was designed and used as data collection was obtained
155 throughout specific time across the same category of individuals.

8 d) Variables

The variables are independent. This is because the variable obtained are stable and unaffected by the other variables that were measured. It refers to the condition that the experiment is systematically manipulated. It is a presumed cause.

9 Schematic representation of the study

10 e) The Setting of the Study

The study was carried out among health care workers that work in a hospital setting as they are the first in line in the battle against COVID-19. These HCWs include Physicians, hospital pharmacist, radiologist, physiotherapist, lab technicians among others

11 f) Sample and Sampling Technique

The sample was calculated using a Cochran formula.

12 i) Tool/Instruments

A self-designed questionnaire was used which is validated by medical experts. The questionnaire was designed in such a way that it provides information related to socio-demographic data, attitude, and practice of HCWs concerning personnel protective equipment used in taking care of patients with COVID-19. The questionnaire consists of a three-part, the first part being the sociodemographic data, then awareness, followed by practice. The results are presented in a tabular form

13 k) Pilot Study

A result of 20 respondents as specified in the outline provided by the school and guide was used as a pilot study. Necessary corrections made during the presentation were implemented and as such the current result provided updated information.

14 l) Data Collection Process

An online validated questionnaire was used which as stated was validated by medical experts. A google doc form was constructed shared among the targeted respondents listed above, who fulfil the inclusion criteria.

15 m) Plan for Data Analysis

Data analysis was done using descriptive and inferential statistical methods to meet the objectives of the study. Findings were presented in the form of Tables and figures. Using SPSS and EXCEL. In terms of practice, 60% of our correspondents are practicing while 25% are not. Table 4 shows the demographic and professional characteristics data of the health care workers. The study analyzed 132 health care workers(HCW), of which 76.5% (105) were found to be male and 23.5% (27) female, this is due to the data obtained from random sampling among the HCW. 52.3% (69) of the HCWs are from the age limit of 26-30 which has the highest percentage and 3.8% (5) age limit 36-40 is the lowest. This is by a study on Personal protective equipment for preventing highly infectious diseases due to exposure to contaminated body fluids in healthcare workers, which also shows a higher percentage of men as compared to women at the age group of 26-30 years [23] . The experience of the HCWs was analyzed, 1-5 years being the highest with 64.39 %(85) followed by those with < 1year having 30(22.72%). Those with high school education represent 5.31 %(7) and 94.69%(125) have at least a degree. This is also following a study on the use of personal protective equipment by health care workers in a There is a high level of awareness among the HCW recorded as seen from Table 2, this can be attributed to the fact that COVID-19 is a pandemic disease and the method of which it can be transmitted as defined by the World Health Organization (WHO) is through physical contact with the infected patient 1 Though PPE prevents the risk of exposure as health workers are more at risk to be infected. The media also plays a vital role in increasing the level of awareness regarding the importance of PPE in the fight against COVID-19, as various outlets provide knowledge to the society, health workers inclusive on the preventive measures required to protect oneself against the pandemic.

On the questionnaire, the level of awareness of the respondents was analyzed. 75.72 % of health care workers are aware of personal protective equipment, 77% are aware of the role personal protective equipment play in the prevention of the spread of COVID-19, 5% are not aware, which shows that more education and awareness is needed, this is in conjunction to the fact that an average person with COVID-19 infection is known to infect 1-5 to 3-5 people. The capacity of an entire hospital to be significantly diminished by a single COVID-19 infection of healthcare staff 2 90% of health care workers are mindful of the added precaution health workers need to protect themselves from COVID-19. The cause of occupational hazards due to the lack of personal protective equipment is a known fact for 80% of the population, though 5% still shows no knowledge on that aspect (reason), some studies show that covering more of the body leads to better protection. Though this may contribute to additional exposure as it is generally correlated with greater difficulties in placing and extracting the personal protective

210 equipment (PPEs) because the PPE becomes less easy 20 . The availability of personal protective equipment
211 amongst health care workers is very low according to our study, this is very alarming due to how fast the disease
212 is spreading and how highly expose health workers are. According to a report by WHO, there is a quite shortage
213 of overall availability of PPE during the outbreak of COVID-19 and a recommendation of management of PPE
214 should be coordinated through essential national and international supply chain management mechanisms, this
215 explains the 68% of the respondents regarding the unavailability of the PPE 1 Another thing we discussed is the
216 ability of the personal protective equipment to interfere with your work. 92.5% of the respondent shows how
217 it affects their ability to do work, studies show how covers are the worst to remove which provide the greatest
218 security, accompanied by long skirts, skirts, and aprons, Though, this may contribute to additional exposure
219 as it is generally correlated with greater difficulties in placing and extracting the personal protective equipment
220 (PPEs) because the PPE becomes less easy 1,2,20 .

221 PPE used by HCWs includes gloves, medical masks, goggles or a face shield, and gowns, as well as for specific
222 procedures, respirators (i.e. N95 or FFP2 standard or equivalent), and aprons (WHO,2020). In this study, 100%
223 practice the use of at least one type of PPE. Regarding the comfortability experienced by HCWs when using
224 PPE, 40% complained about breathing problems and prefer the N95 respirator over the regular surgical masks.
225 The use of overall disposable gown to provide a physical barrier to microbes as well as COVID-19 was a common
226 practice by 85% of the respondents. There is a wide range of personal protective equipment (PPEs) globally
227 varying from strong respiratory purifiers (PAPRs) to different facemasks, helmets, gowns, and gloves. Epidemics
228 of severe acute respiratory syndrome coronavirus 2003 (SARS-CoV-1) or Middle East Respiratory Syndrome
229 Corona Virus (MERS) have historically occurred in countries (eg, China, Taiwan, and South Korea), where suits
230 for PAPR and Hazmat are available. Some of the most impressive value of PAPR is the re-usability of aerosol
231 producing medical procedures (AGMPs), thus giving them safety [53] . Job performance is affected by at least
232 41% of the respondents while 43.6 % experienced no such issues. To improve the practice, 87.2% stated that, the
233 presence of reminder posters at their places of work significantly increases their ability to wear a PPE. Hence,
234 85% regularly wear their PPE.

235 16 VIII.

236 17 Conclusion

237 In conclusion, the level of awareness is quite high as seen from the results, and also there is a need to educate more
238 regarding the use of PPE despite their uncomfortably stated by few HCWs. The practical use of PPE during this
239 pandemic is also much as the result shown. Their availability is a matter of great importance F disease outbreak,
240 showing that the majority of health workers associated with disease outbreak are degree holders, this shows that
241 people are educated, and shows that at the beginning of the outbreak, a significant proportion of health care staff
242 became infected, probably secondary to a lack of awareness and inadequacy of personal protective equipment
243 (PPE) [1] . as there is a shortage of overall equipment due to high demand.

244 IX.

245 18 Recommendation

246 ? Recommendation to the next researcher 1. A similar study can be conducted to access the awareness and
247 practice of personal protective equipment use during COVID-19 among health care personnel and to find the
248 actual impact of the transmission of the disease. 2. Along with an individual approach, all the health care
249 personnel should be encouraged to participate in international and national awareness of personal protective
250 equipment use during COVID-19

251 ? Recommendation to the policymakers and health sector: 1. A public health approach that seeks to change the
252 status and promote supportive strategies for better health and protection against diseases like COVID-19 which
253 are easily transmitted. 2. Government legislation should increase awareness of personal protective equipment
254 use during COVID-19, along with some guidelines in public places and advertisement of encouraging the use by
255 both patients and healthcare workers.

256 19 Public Health Implication

257 ? Public health is the science and art of preventing diseases, prolonging life, and improving human health through
258 better education and awareness, policymaking, promoting a standard lifestyle, research, and prevention. ? The
259 issue of personnel protective equipment and health care workers is an important integral part of public health
260 care as a whole. Since the outbreak of COVID-19, health care workers have been the face in the fight and prevent
261 the spreading of this disease. ? The finding of this study can help in planning an education program to raise
262 awareness in the public regarding the safe use of personnel protective equipment, COVID-19, and its ill effect on
263 health. ? The findings brought to light that if awareness and health education programs are implemented, it will
264 help to change the negative behavior to positive and health situations. And still, the education of the youths
265 remains the most effective policy and strategy on hygiene misconception.

20 Limitation of the Study

266
267
268
269

This study is only limited to those health workers that are only based in the hospital, which are the for the front in the fight against.

Funding: This research received no external funding.

21 Conflicts of Interest:

270
271

The authors declare no conflict of interest.

22 Ethics approval and consent to participate

272
273
274

There's no need for ethical approval for this review since no patient data will be collected. In this study author has thoroughly analyzed ethical issues including the plagiarism, confidentiality, malfeasance, data falsification and/or falsification, double publishing and/or submission, and duplication.

$$n = \frac{n_0}{1 + \frac{(n_0 - 1)}{N}}$$

Figure 1: .

275

¹Web Desk. "Infections over 1 lakh, five cities with half the cases: India's coronavirus story so far." <https://www.theweek.in/News/India/2020/05/19/Infections-Coronavirus-1-Lakh-Five-Cities-with-Half-the-Cases.html> 2020.© 2022 Global Journals

²© 2022 Global Journals

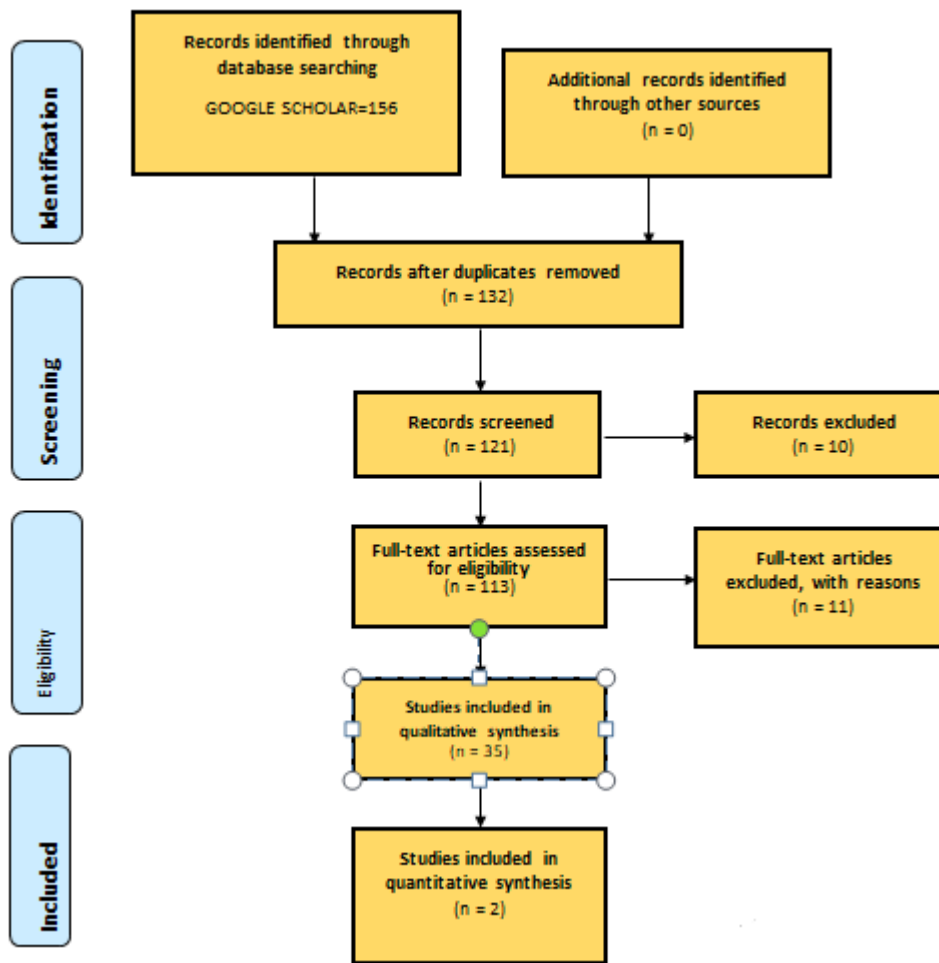


Figure 2:

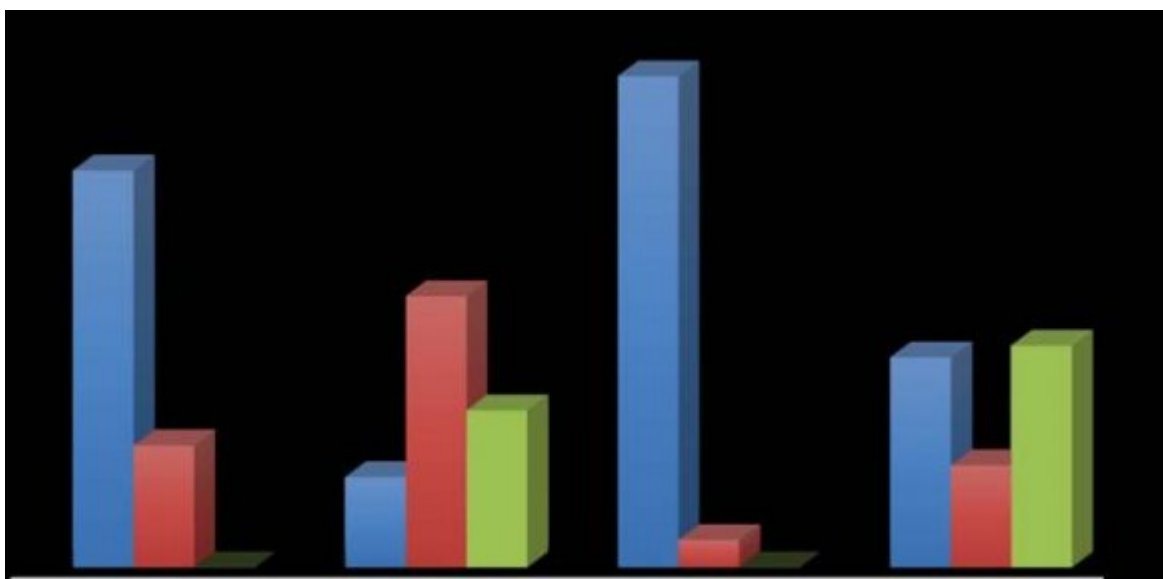
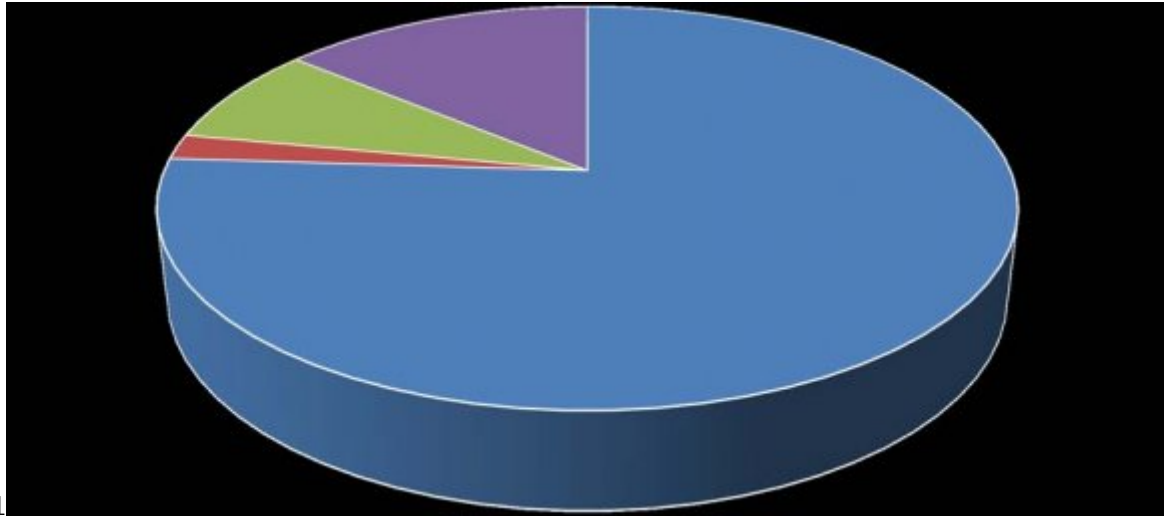
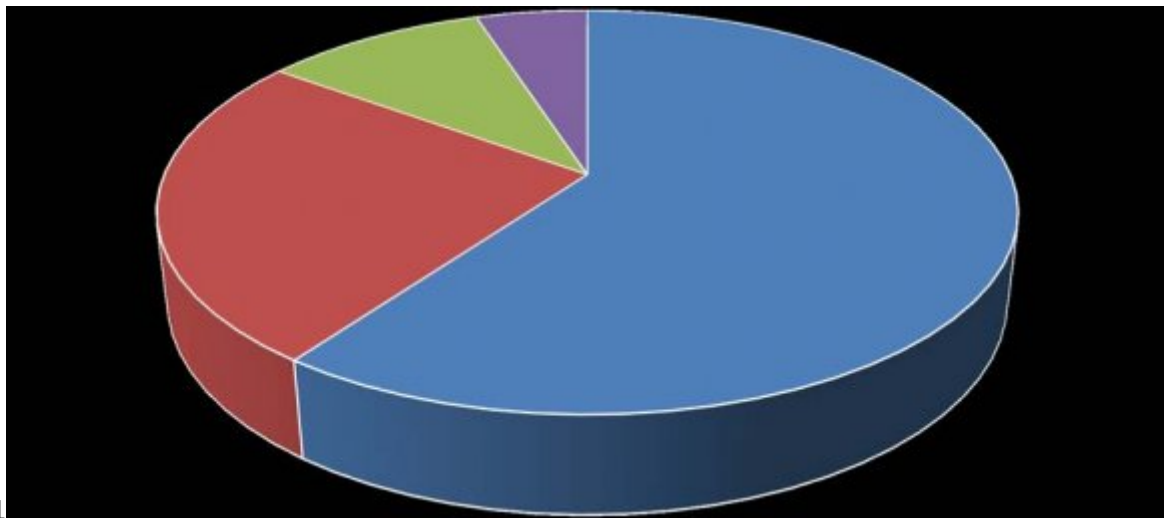


Figure 3: F



1

Figure 4: Equation 1



1

Figure 5: Figure 1 :

[Note: 19 Pietz J, McCoy S, Wilck J. Chasing John Snow: data analytics in the COVID-19 era. *Eur J Inf Syst* 2020;1-17.20 T.M. Cook. Personal protective equipment during the coronavirus disease (COVID) 2019 pandemic a narrative review. *Anesthesia* 2020; 75:920-7. <https://doi.org/10.1111/anae.15071>.]

Figure 6:

3

S/N	Activity	Time	Responsible person
		Frame	
		Oct Nov	
		Dec Jan	
		Feb Mar	
		Apr	
		May	
	Research topic development		Health worker care
	Concept development and approval		Health care worker and supervisor
	Research proposal writing	Final exam	Health worker supervisor care and
	Submission of research proposal		Health worker care
	Data collection		Health worker supervisor care and
	Data analysis		Health worker supervisor care and
	Dissertation writing		Health worker supervisor care and
	Submission of dissertation and dissemination of results		Hospital health worker care

Figure 7: Table 3 :

2

S/n		AWARENESS				
		YES (%)	NO (%)	NOT SURE (%)	VERY LITTLE BIT (%)	LITTLE (%)
1	Do you know what personal protective equipment is	75.7	22.5	0	18.94	3.20
2	Do you know the role of personal protective equipment in the prevention of Covid-19?	77.0	17.5	0.25	0	2.5
3	Do you know that additional precautions are required by health care workers to protect themselves from Covid-19?	90	5	2.5	2.5	0
4	Do you know that the type of personal protective equipment used for COVID-19 patients varies among personnel?	84.6	10.3	0	5.1	0
5	Do you know that the lack of use of Personal protective equipment can lead to an occupational hazard related to COVID-19?	80	5	2.5	7.5	5
6	Does Personal protective equipment always available to you?	27	62.2	2.7	2.7	5.4
7	Do you know that personal protective equipment interferes with the ability to do a job?					

Figure 8: Table 2 :

3

S/n		PRACTICE		AWARENESS	
		YES (%)	NO (%)	YES (%)	NO (%)
1	Do you think wearing personal protective equipment is uncomfortable for you?	37.88	49.2	14, 14%	76, 76%
2	Do you think personal protective equipment provides a physical barrier to COVID-19?	84.85	7.56	8, 8%	2, 2%
3	Do you believe your job performance is affected by wearing personal protective equipment?	41	43.6		
4	Did you experience any difficulties, incidents, or accidents while using personal protective equipment?	23.1	59		
5	Do you think that posters in the working area are important in reminding you to wear personal protective equipment?	87.2	0		
6	Do you regularly wear personal protective equipment?	85	15		
7	Do you share your protective equipment?	5	85		

Figure 9: Table 3 :

4

	Crosstab					I don't know
	Practice-based on literacy and education					
	yes	no	Not sure	maybe		
Years of practice	<1	36	9	4	5	74
	1-5	26	8	3	0	57
	6-10	27	5	1	3	36
	11>	10	3	0	0	13
Total		89	25	8	8	132
Chi-Square Tests						
		Value	Degree of freedom	Asymptotic Significance (2-s		
Pearson Chi-Square		7.354 a	9	.600		
Likelihood Ratio		10.560	9	.307		
Linear-by-Linear Association		.338	1	.561		
N of Valid Cases		180				

Figure 10: Table 4 :

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Figure 11:

.1 Acknowledgements

Firstly, I would like to give all thanks to God for granting me the grace to conduct and conclude this research assignment for my academic accomplishment. For writing this article I would like to thank and express gratitude to my mentor who encouraged to me and guided through out. And who had dedicated their precious time in guiding me throughout the journey, directly or indirectly. I would like to extend a special thanks to all my friends their endless support and assistance in completion of this research. Lastly, I would like to thank my family for their love, patience and support during the development of this research.

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