

## **Impact of Violence in Health Care Worker in Workplace at Emergency Department in the Governmental Hospital during COVID-19 Pandemic in Saudi Arabia2022**

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### **Abstract**

#### **Background**

Emergency departments are currently dealing with a problem that is widely recognized, workplace violence against healthcare workers. It is known that there has been an increase over the years in attacks by patients admitted to the emergency department (ED) on healthcare workers; it is unclear what effect the COVID-19 pandemic has on these attacks. During the COVID-19 pandemic, significant cases of violence, intimidation, or stigmatization were targeted at healthcare workers (HCWs), patients, medical infrastructure and emergency department. These occurrences were most likely just the “tip of the iceberg,” with much more remaining unnoticed. The coronavirus pandemic is a global pandemic of coronavirus disease 2019 (COVID-19) that was discovered in Wuhan, China, for the first time, then spread all over the globe. Healthcare workers (HCWs) are the backbone of all healthcare systems. Therefore, they are at the front line of COVID-19 and confront threats that endanger their lives.

**Aim of the study:** To explore the impact of violence in health care worker in workplace at emergency department in the governmental hospital during COVID-19 pandemic in Saudi Arabia2022.

**Method:** Cross-sectional analytical study has been conducted at emergency departments (EDs), Ministry of in the governmental hospital during COVID-19 pandemic in Saudi Arabia during data collection period 2022, the total sample has been (200) of health care worker.

**Results:** the age the highest age was(44.0%) were( >30) years followed by 30-35years were(33.0%), regarding the gender the most of participant female were (71.0%) while males were (29.4%), regarding the nationality Saudi were (55.0%) while non-Saudi were (45.0%) regarding the marital status more than half of participant married(66.0%) and (17.0%)were single. Regarding Your qualification is majority of the participated had Bachelor were(31.0%), regarding Job title the majority of participated nursing were(75.0%).

**Conclusion:** The COVID-19 pandemic has led to a significant increase in attacks on healthcare workers in the ED. Trends compared to pre-pandemic months do not seem to indicate a return to normality. Health institutions and policymakers should develop strategies to improve the safety of the working in governmental hospital Encouragement to report violent incidents and raising awareness among HCWs about violence reporting systems are important strategies to improve workplace safety.

**Keywords:** Impact, violence, health care worker, emergency, Department, COVID-19, governmental, hospital, Saudi Arabia.

## Introduction

The coronavirus pandemic is a global pandemic of coronavirus disease 2019 (COVID-19) (1) that was discovered in Wuhan, China, for the first time, then spread all over the globe (2). Healthcare workers (HCWs) are the backbone of all healthcare systems. Therefore, they are at the front line of COVID-19 and confront threats that endanger their lives (3). Workplace violence (WPV) is described as the use of force against another person or a group of people in work-related situations that result in physical or psychological damage, and even death (4). WPV among HCWs is recognized as an alarming global phenomenon (5)

Primary Health Care Centers (PHCs) that are at the greatest risk of being affected by WPV have the ability to provide decision makers with reference information, which enables those decision makers to assign the right activities to the relevant personnel. (6) Previous research on the prevalence of WPV in nursing staff varied greatly from one location to the next, according to the various grades of hospitals and PHCs. (7). In this scenario, emergency departments play a key role in the early identification of infected patients requiring prompt treatment and hospitalization.(8) The work overload due to the increased access of patients to the emergency department (ED), notoriously a stressful environment, the long work shifts, and the overwhelming psychological stress led to increased risk of fatigue, insomnia, emotional disturbances such as depression and anxiety, and burnout among healthcare personnel (9). This situation was worsened by the increased stigmatization, intimidation, verbal and physical violence, and aggression against health personnel, which have been increasingly reported worldwide during the current pandemic (10). This may reflect the negative emotional impact upon the general population exerted by the COVID-19 disruptions and restrictions of social and economic activities.(11) The risk of violent or threatening behavior by patients and relatives is further increased by the adoption of measures to prevent and control the spread of Sars-COV-2 infection, such as quarantine and isolation (12). Workplace violence against healthcare professionals is associated with negative consequences, including work dissatisfaction, medical errors, mental health problems, and reduced quality of patient care, and represents therefore a major public health issue (13)

WPV may be defined in a few different ways, some of which restrict it to instances of physical attack or injury, while others include non-physical forms of abuse as well, such as verbal,

emotional, or racial harassment (14). According to the WHO, 2019, Violence is characterized as the willful exercise of dominance that places individuals or groups of individuals in risk and has the potential to result in physical pain, psychological damage, or even death. According to the WHO's definition, WPV is. "any incident where staff was physically or psychologically abused, threatened, or assaulted in their work environment."(15) Although it is generally accepted that WPV falls under the dimension of physical harm, the WHO defined that an implicit challenge to well-being also includes violence as one of the factors to evaluate.(16) In spite of the fact that there is no one definition that is universally recognized and approved within the body of research, there is widespread agreement around the globe that healthcare workers are common victims of WPV.(17)

### **Rationale:**

This workplace violence can take a variety of forms and be instigated by a wide range of individuals; the prevalence of this problem also varies greatly across different regions of the world. In Saudi Arabia, over the course of a significant number of years, a number of studies have been carried out addressing the frequency of violence directed at medical personnel working in emergency rooms. According to the findings of a recent research carried out in Saudi Arabia about half of all emergency department doctors and nurses have been exposed to workplace violence at least once throughout the course of a single year, with physicians experiencing higher rates of violence, the most common type of workplace violence was verbal threats . Which reported a high prevalence of workplace violence and found that the most common type was verbal abuse among health-care workers in emergency departments . In addition, found that workplace violence was more common against physicians, while it was lower among nurses , mostly among those with more experience in emergency departments , and that of violent abuses occurred during night shifts .

### **Aim of the study:**

To explore the impact of violence in health care worker in workplace at emergency department in the governmental hospital during COVID-19 pandemic in Saudi Arabia2022

### **Specific objectives:**

#### **Primary objective:**

This study will by to explore the impact of violence in health care worker in workplace at emergency department in the governmental hospital during COVID-19 pandemic in Saudi Arabia2022 .

#### **Secondary objective:**

To assess the impact of violence in health care worker in workplace at emergency department in the governmental hospital during COVID-19 pandemic in Saudi Arabia2022 .

### **Literature Review .**

The National Institute for Occupational Safety and Health (NIOSH) characterized workplace violence as "act or danger of violence, going verbal abuse to physical assaults directed toward people at work or on the job" (18) The following is outline of the foremost important studies in Saudi Arabia:

As of late in Riyadh (2017), Alharthy N and her studies group researched the prevalence of workplace violence about emergency medical services laborers. They reasoned that the prevalence

of workplace violence was 65%. Concerning the type, verbal abuse was the commonest (61%). Most of the perpetrators were patients' family members relatives (80%) followed by patients themselves (51%). More youthful (<30 years), lower experienced staff ( $\leq 10$  years) had fundamentally higher violent incidents than their partners. Reporting the incidents the occurrences to a more significant position authority was referenced by just 10% of the victims.(19)

A study in the Arabian Gulf region concluded that WPV among healthcare providers in EDs is common and can be serious when weapons are used. The majority of respondents, 75.6%, said that they have experienced verbal abuse or bullying at the hands of patients or families of patients. (20) Aljohani B. et al. (2021) conducted a systematic review that included 26 articles and found that WPV in the ED was reported in 9072 cases, with 6575 (72%) involving verbal abuse and 1639 (18%) involving physical violence. This study showed that healthcare providers who experienced workplace violence were 2112 physicians (36.5%), 3225 nurses (55.7%), and 455 other ED staff (7.8%).(21)

At a university hospital, Eastern area (Khobar), Al-Shamlan et al (2017) gauges the prevalence of verbal abuse about nurses. Over a time of one year, the pervasiveness of verbal abuse was 30.7% about nursing. Greater part of them didn't report the incidents; Majority because they believed that reporting would yield no positive results. Male nurses, nurses in the emergency department, and those who indicated that there were procedures for reporting violence in their workplace were more likely to have verbal abuse.(22) This study is limited by the fact that they included all nursing staff not only those working in emergency departments and also it focused on nurses only.

In Bahrain, Rafeea F, et al (2017) completed a cross-sectional at the ED of the Bahrain Defense Force to assess frequency of violence in the workplace. Results uncovered that the most regular frequent reported type of violence in the past 12 months was verbal abuse (78%), trailed by physical abuse (11%) and sexual abuse (3%). most than half (53%) of instances of violence happened during night shifts, while physical abuse was accounted for to happen during all the shifts.(23)

An extensive extent (40%) of the staff didn't know about the strategies against workplace violence, and 26% of the staff thought about finding employment elsewhere. The most elevated reasons of violence revealed by the staff were long holding up time and patient expectations.(24) However, this research's was directed in one healthcare facility which could influence the generalizability of its outcomes.

## **Methodology**

### **Study Design**

Cross-sectional analytical study design has been adopted.

### **Study Area**

The study has been conducted at emergency departments in governmental hospital , the largest seaport on the Red Sea, there are hospitals belonging to Ministry of health and include emergency departments, where the study has been carried .

### **Study population:**

Physicians and nurses providers working at emergency departments of governmental hospitals in Saudi Arabia (males and females) have been included in the study.

## Eligibility Criteria

### Inclusion criteria:

- Physicians and nurses working at emergency departments of governmental hospitals in Saudi Arabia.
- Male and female .
- All nationalities.

### Exclusion criteria:

Healthcare providers working in clinics at primary healthcare centers in Saudi Arabia .

## Sample Size

The hospitals belonging to MOH are classified into 3 categories, general hospitals (n=5), psychiatric hospitals (n=2) and non-general, non-psychiatric hospitals (n=3). Using Roasoft online sample size calculator and assuming the number of physicians and nurses working at emergency departments, Ministry of health hospitals is 846 .

The prevalence of workplace violence at emergency department . At 95% confidence of interval and 5% accepted margin of error, the sample size is 200 physicians and nurses. This figure has been increased by 10% to compensate for none or incomplete response, thus the total sample has been(200) physicians and nurses.

## Sampling Technique

**Stage I :** Stratified sampling techniques (selection of the hospitals)

The Ministry of Health hospitals has been divided into strata : general hospitals (n=5), psychiatric hospitals (n=2) and non-general, non-psychiatric hospitals (n=3)

From each stratum one hospital has been selected by simple random technique .

The selected hospitals are: King Abdul-Aziz hospital , Al Aziziyah hospital, Alamal hospital .

**Stage II:** selection of health workers

The total number has been taken from each selected hospital based on proportion to sample size. Then the health workers) has been divided into two strata. Doctors and nurses .

From each stratum the sample has been calculated based on proportion to size.

## Data Collection Tool

A self-administered questionnaire distributed to all working physicians and nurses in the EDs departments, MOH hospitals chosen for the study. The questionnaire was mainly developed from literature review and the WHO survey questionnaire about violence in health care settings validity has been taken by 3 consultants.

**The first section** of questionnaire includes demographic data of the respondents (age, gender, nationality, job title, qualification, marital status and years of experience).

**The second section** has been consist of questions to estimate physical abuse , how many time ,during which shift, type and place of violence, source of violence , reasons , outcome of violence, reported or not , if reported to whom and if not why .

**The third section** has been consist of questions to estimate verbal abuse , how many time ,during which shift, type and place of violence, source of violence , reasons , outcome of violence , reported or not, if reported to whom and if not why.

### Data Collection Technique

The researcher has been visit the chosen EDs, MOH hospitals in Saudi Arabia after getting official permissions to conduct the study .

They have been explaining the purpose of the study to the ED head in each setting. Then, the questionnaire has been distributed on physicians and nurses after explaining the purpose of the study and how to fill the questionnaire to them.

### Data Entry and Analysis

Data has been collected, reviewed, coded and entered into the personal computer. Data has been presented in the form of frequencies and percentages. Chi-squared test ( $\chi^2$ ) has been used for comparing qualitative data. Other statistical tests has been applied whenever appropriate. Statistical significance has been considered at p-value  $\leq 0.05$ . Analysis has been done using SPSS program version 24.

### Pilot Study

A pilot study on 10% of physicians and nurses in one of the non-selected hospitals has been conducted to test the feasibility of the methodology and wording of the questionnaire as well as to estimate the average time to complete it. A necessary modification has been done, based on pilot study results. Their results has been not included in the final report .

### Ethical Considerations

- Approval from the Research and Ethical Committee Joint Program of Family Medicine was taken.
- Approval from the director of Ministry of health in Jeddah has been obtained.
- All collected data has been kept confidential and will not use except for research purposes.

### Budget

- The research will be self-funded

### Result

**Table 1. Distribution of Socio-demographic characteristics of the studied population (200)**

		%
<b>Age</b>		
<30	46	23
30-35	66	33
>35	88	44
<b>Gender</b>		
Female	142	71
Male	58	29
<b>Nationality</b>		
Non-Saudi	90	45
Saudi	110	55
<b>Marital status</b>		
Single	34	17

Married	132	66
Widowed	24	12
Divorced	10	5
<b>Your qualification is</b>		
Diploma	52	26
Bachelor	62	31
Resident	46	23
Specialist	14	7
Master	20	10
Consultant	6	3
<b>Job title</b>		
Doctor	50	25
Nurse	150	75

Regarding the age the highest age was(44.0%) were( >30) years followed by 30-35years were(33.0%), regarding the gender the most of participant female were (71.0%) while males were (29.4%), regarding the nationality Saudi were (55.0%) while non-Saudi were (45.0%) regarding the marital status more than half of participant married(66.0%) and (17.0%)were single. Regarding Your qualification is majority of the participated had Bachelor were(31.0%), followed Diploma were(26.0%), regarding Job title the majority of participated nursing were(75.0%), followed by doctor were(25.0%).

**Table 2 Distribution of the characteristic of experienced and type of workplace violence**

	N	%
<b>Primary Shift</b>		
Day	24	12
Evening	108	54
Night	68	34
<b>Years of experience in emergency department</b>		
Under 1 year	38	19
1 - 5 years	64	32
6 - 10 years	44	22
11 - 15 years	32	16
16 - 20 years	22	11
<b>Have you ever experienced physical or verbal violence</b>		
Yes	120	60

No	80	40
<b>Which type of violence</b>		
Physical	12	10.00
Verbal	86	71.67
Both	22	18.33

Table 2 show more than half of the participants were evening shift were (54.0%) followed by Night were(34.0%), regarding the Years of experience in emergency department the most of participant 1 - 5 years were (32.0%). Followed by 6 - 10 years were(22.0%), regarding you ever experienced physical or verbal violence the most of participant were answer Yes were(60.0%) followed by No were(40.0%), regarding type of violence the most of participant verbal were (71.67%) while both Physical and Verbal (18.33%).

**Table 3 Description of Violence in the emergency department by survey period during COVID-19**

	Pre/Early-COVID		Mid/Late-COVID		Chi-square	
	No	%	No	%	P-Value	P-Value
<b>How safe do you feel in the emergency department</b>						
Extremely safe	130	65	36	18	119.798	<0.001
Very safe	52	26	54	27		
Moderately safe	12	6	64	32		
Slightly safe	4	2	24	12		
Not safe at all	2	1	22	11		
<b>How often were you verbally abused by patients or visitors in the past 6 months?</b>						
Less Than Once a Month	94	47	42	21	53.603	<0.001
Every Month	42	21	32	16		
Every Week	20	10	62	31		
Every Day or Two	40	20	44	22		
Less Than Once a Month	4	2	20	10		
<b>How often have you reported incidents of violence in the past 6 months?</b>						
Always	68	34	30	15	26.817	0.0001
Often	42	21	32	16		
Sometimes	36	18	54	27		
Rarely	24	12	42	21		
Never	14	7	22	11		
Not Respond	Applicable/did not	16	8	20	10	



Table 3 how regarding safe do you feel in the emergency department most of participants answer Extremely safe were(65.0%) follow by Very safe were (26.0%,) during Pre/Early-COVID while a significant relation were P-value <0.001 and  $X^2$ 119.798 .

Regarding often were you verbally abused by patients or visitors in the past 6 months the most of participant answer Less Than Once a Month were(47.0%) during Pre/Early-COVID but Every Week were(31.0) during Mid/Late- COVID While a significant relation were P-value <0.001 and  $X^2$  53.603.

Regarding often have you reported incidents of violence in the past 6 months the most of participant answer Always were(34.0%) during Pre/Early-COVID but Sometimes were(27.0) during Mid/Late- COVID While a significant relation were P-value <0.001 and  $X^2$  26.817

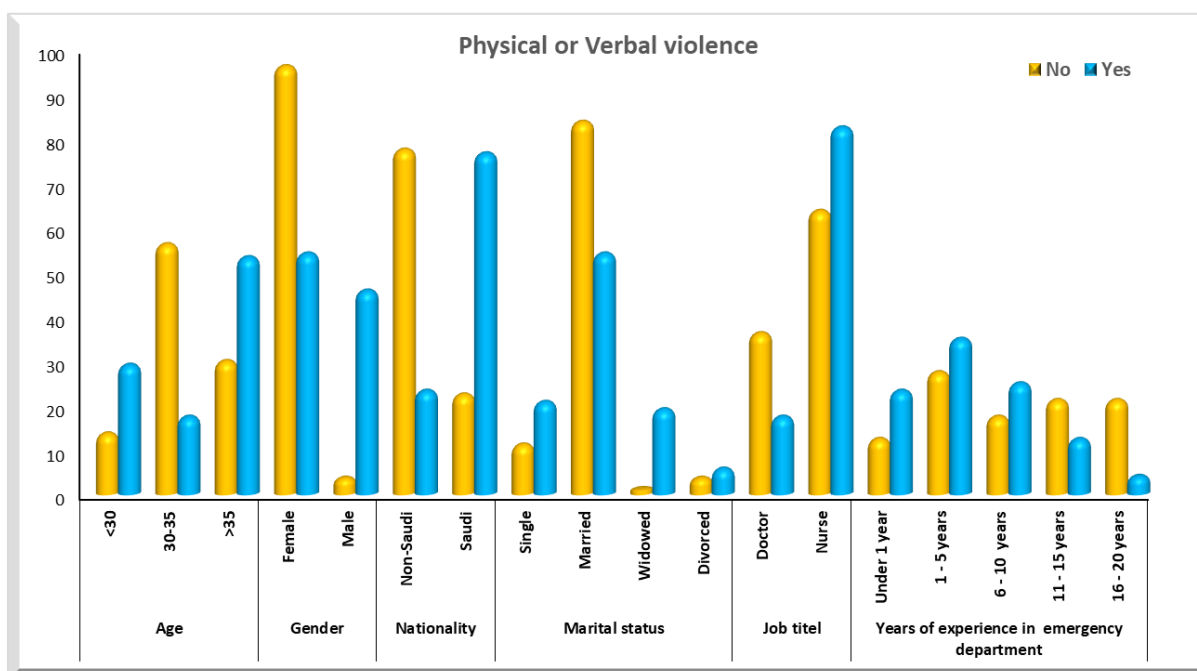
**Table 4 Description of the relation between Socio-demographic data and workplace Physical violence during COVID-19**

		Physical or Verbal violence				Total		Chi-square	
		No		Yes					
		(n=80)		(n=120)		N	%	$X^2$	P-value
		N	%	N	%				
Age	<30	11	13.75	35	29.17	46	23.00	32.740	0.000
	30-35	45	56.25	21	17.50	66	33.00		
	>35	24	30.00	64	53.33	88	44.00		
Gender	Female	77	96.25	65	54.17	142	71.00	41.286	0.000
	Male	3	3.75	55	45.83	58	29.00		
Nationality	Non-Saudi	62	77.50	28	23.33	90	45.00	56.902	0.000
	Saudi	18	22.50	92	76.67	110	55.00		
Marital status	Single	9	11.25	25	20.83	34	17.00	22.215	0.000
	Married	67	83.75	65	54.17	132	66.00		
	Widowed	1	1.25	23	19.17	24	12.00		
	Divorced	3	3.75	7	5.83	10	5.00		
Job title	Doctor	29	36.25	21	17.50	50	25.00	9.000	0.003
	Nurse	51	63.75	99	82.50	150	75.00		
Years of experience in emergency department	Under 1 year	10	12.50	28	23.33	38	19.00	20.068	0.000
	1 - 5 years	22	27.50	42	35.00	64	32.00		
	6 - 10 years	14	17.50	30	25.00	44	22.00		
	11 - 15 years	17	21.25	15	12.50	32	16.00		
	16 - 20 years	17	21.25	5	4.17	22	11.00		

Regarding age results show a significant relation between physical or verbal violence and age were  $X^2$  32.740 and P-value=0.000, increase (in the age 30-35 answer No were 56.25% followed by Yes were (53.33%), while total (23.00%), regarding gender was significantly associated with physical or verbal violence, with violence being more frequent for female in No (96.25%) followed by Yes were(54.17%) than male, show a significant relation were P-value < 0.001 and  $X^2$  41.286, while total (71.00%). Regarding Nationality was a significantly associated with physical or verbal

violence were  $X^2$  56.902 and P-value=0.000 and was more frequent for non-Saudis answer No (77.50%) than Saudis in Yes (76.67%), while total (55.00%). Regarding Marital status was a significantly associated with physical or verbal violence were  $X^2$  22.215 and P-value=0.000 and was more frequent for married answer No (83.75%) than in Yes (54.17%), while total (66.00%), regarding Job title results show a significant relation between physical or verbal violence and Job title were  $X^2$  9.000 and P-value <0.000 increase nurse were 63.75% in No , but answer Yes were 82.50%, while total (75.00%). regarding Years of experience in emergency department results show a significant relation between physical or verbal violence and Years of experience in emergency department were  $X^2$  20.068 and P-value <0.000 increase 1 - 5 years in No were 27.50% , regarding Yes were(35.00%) while total (32.00%),

**Figure 1 Description of the relation between Socio-demographic data and workplace Physical violence during COVID-19**



## Discussion

Workplace violence against HCWs in conflict settings has been a major concern for decades. The COVID-19 pandemic appended an additional burden on the already stressful healthcare work environment (25), also workplace Violence among Physicians and Nurses at Emergency Department is a serious phenomenon that affects the patient experience as well as the quality of practice for healthcare providers, the global and rapidly expanding pandemic has placed unprecedented pressures on healthcare systems all over the world. Due to heavy clinical workloads, low clinician-patient ratio, and stressful work settings, HCWs are vulnerable to high risk of WPV (26). They have withstood to keep up with the intensifying care needs, and many healthcare structures have suffered enormous difficulties to their provision of healthcare services (27), the aim of study to explore the impact of violence in health care worker in workplace at emergency department in the governmental hospital during COVID-19 pandemic in Saudi Arabia2022. Our study showed that the age the highest age was(44.0%) were( >30) years followed by 30-35years were(33.0%), regarding the gender the most of participant female were (71.0%) while males were

(29.4%), regarding the nationality Saudi were (55.0%) while non-Saudi were (45.0%) regarding the marital status more than half of participant married(66.0%) and (17.0%)were single. Regarding Your qualification is majority of the participated had Bachelor were(31.0%), followed Diploma were(26.0%), regarding Job title the majority of participated nursing were(75.0%), followed by doctor were(25.0%). (see Table 1)

In the results of another study, where verbal attacks were the most reported WPV attacks among the participants . This is also in line with previous studies in Egypt (28) and Jordan (29), which showed that verbal abuse occurs more often than physical violence. This similarity might be attributed to the fact that the Arab countries almost share culture, social, environmental, and behavioral factors.

Moreover, in Ethiopia, verbal abuse was the most well- known type of violence, followed by physical violence (30). In South Korea, a survey study was conducted at a Seoul university hospital and found that the prevalence of verbal abuse was higher than that of physical violence (28)

Most studies have shown that psychological violence (especially verbal abuse) was higher than physical violence.(24) The number of incidents of verbal abuse was approximately 5-fold that of the number of incidents of physical violence among nurses in several EDs in Jordan(28). Similarly, a study in Macau revealed incidents of verbal abuse (53.4%) (29) Verbal abuse was the most common form of violence because it was easy to perpetuate and could not be controlled by any sort of security measures.(27), but contrary to others[28,29] , in which the companions of the patients and patients relative were the main source of incidents. health care workers in emergency departments who experienced violence reported that it was caused by absence of action(51.4%), shortage of staff was the most common cause of verbal violence (42%), while lack of security were (56.5%) the most common cause of physical violence. as supported by management in the workplaces, following the rule “the patient is always right”. Workplace violence had negative consequences on Physicians and Nurses at Emergency Department, which is supported by previous studies (30)) See Table 3,4)

## Conclusions

The current study showed that violence against HCWs is a major problem. Verbal violence came first, followed by physical violence. The regular reporting of these incidents is deficient. The victims suffered psychological and physical effects. Also, that the patient’s relatives were the principal perpetrators of violence against HCWs. These assaults on healthcare facilities highlight the importance of effective risk communication at all levels of society to minimize anxiety, stigma, and, eventually, WPV. Moreover, the way we communicate about COVID-19 is vital in motivating people to take proactive steps to fight the disease and safeguard healthcare.

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