

## Psychological Effect of COVID-19 on Health of Medical Personnel in Hospitals in Eldoret Town, Kenya

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### ABSTRACT

Coronavirus disease (COVID-19) greatly affected medical personnel. Researchers have documented the detrimental effects of COVID-19 on the health of medical personnel, among them being high levels of infection and mortality, significant financial strains, anxiety related to both known and unknown information, and fear of ongoing impact and uncertainty. The objective of the study was to investigate the effect of COVID-19 on the psychological health of medical personnel. The study adopted a cross-sectional descriptive research design and was anchored on the Stress and Coping Theory. They targeted all 18 hospitals in Eldoret, comprising 3 public and 15 private hospitals. The population included 34 doctors, 55 laboratory technicians, 71 clinical officers, and 219 nurses, totalling 379 as a population under study. A sample size representing 50% of the total population was selected for the study. In a proportionate way, doctors, laboratory technicians, clinical officers, and nurses were selected at a ratio of 1:2:3:4, respectively. The snowball sampling technique was used to select respondents. The data was gathered through a questionnaire. The study's findings were analysed quantitatively. Multiple linear regressions were applied to examine the effect of COVID-19 on the health of medical personnel. Findings indicated that the psychological effect of COVID-19 had a positive and significant influence on the health of medical personnel ( $\beta_1 = .646, P < 0.05$ ). Highlighting the profound psychological effects, the majority (77.7%) experienced stress. Therefore, COVID-19 had profound psychological effects on the health of medical personnel in hospitals in Eldoret town. There is a need to implement and expand psychological support programs tailored to the needs of medical personnel. Providing access to counselling services, stress management workshops, and peer support groups could help address the psychological challenges faced by medical personnel in responding to crises such as the pandemic.

**Keywords:** COVID-19, Eldoret, Health, Medical Personnel, Psychological Effect

### I. INTRODUCTION

The highly transmissible disease COVID-19 was initially discovered in China by the end of 2019 in a city known as Wuhan in Hubei Province (Wang et al., 2020). It was declared a pandemic in the month of March 2020, as per the World Health Organisation [WHO] (2020). Due to its fast spread from one country to another, the World Health Organisation pronounced COVID-19 a pandemic. The pandemic has profound health-related issues, including high levels of stress, anxiety, and depression in the general population (Ornell et al., 2020).

A recent survey on the psychological effects of COVID-19 conducted in Spain revealed that 18.7% of the population exhibited depressive symptoms, while 21.6% experienced anxiety, and 15.8% developed PTSD symptoms during the COVID-19 pandemic (González-Sanguino et al., 2020). This indicates a significant psychological impact of the pandemic on individuals. Medical staff played a crucial role in combating the epidemic, but they faced unique challenges, particularly those on the front lines (Heymann & Shindo, 2020). The demanding nature of their work, combined with a lack of sleep and staffing shortages, created a highly stressful environment (Chen et al., 2020). These factors may have contributed to increased psychological strain, depression, and fatigue among medical workers. Further, the care and treatment of COVID-19 patients can trigger negative psychological reactions such as fear, depression, and social psychological issues.

In Kenya, a study by Mutai (2022) assessed the psychological health impact of the COVID-19 pandemic on healthcare workers. The study examined the coverage of depression by the media, especially the Daily Nation newspaper. Mutai highlighted such psychological effects as increased stress, anxiety, and burnout among medical

personnel. Similarly, Mwangi et al. (2023) investigated the experiences of frontline healthcare workers in Kenya during the pandemic. The study focused mainly on the role of hospital leadership in the management of staff experiences during the COVID-19 response. The study's findings emphasised the need for adequate resources and support for healthcare providers.

On April 10, 2020, Uasin Gishu County in Eldoret confirmed the first case of COVID-19 at the Moi Teaching and Referral Hospital (MTRH). The patient was reported to be stable under the care of MTRH. The contact tracing was being undertaken by medical surveillance officers. This was according to the then MTRH CEO, Dr. Wilson Aruasa, who added that over 105,000 individual screenings had been completed at MTRH by that date. At the time, the overall harmonisation of the COVID-19 response remained the duty of a multi-sectoral taskforce known as the National Emergency Response Committee (NERC), which includes representatives from the health, education, security, transportation, finance, and trade sectors (Kwobah et al., 2021). Rules and regulations for handling the cases were properly executed. Disease anticipation and control measures were established by NERC, which identified the relevant health offices and public and confidential laboratories where tests and investigations were to be undertaken to test for the disease and implement treatment measures. Healthcare workers play a significant role in providing health care services in times of crisis. However, situations like the coronavirus pandemic stretched resources to the limit. The situation became more complicated because of the uncertainty. Stigma, anxiety, and marginalisation associated with the disease, as well as an infrastructure that was ill-prepared to handle the situation, aggravated the disease burden.

### 1.1 Statement of the Problem

The COVID-19 outbreak posed significant health risks to medical personnel worldwide. In Eldoret town, Kenya, medical personnel in the region faced heightened exposure to the virus, leading to increased rates of infection, severe illness, and even fatalities among them. The psychological toll of the virus was compounded by the challenges of prolonged stress, anxiety, and burnout stemming from high patient loads, inadequate protective equipment, and the emotional burden of witnessing patient suffering and mortality. Past studies have examined the effect of COVID-19 on patients (Asmundson & Taylor, 2020), families of patients (Kang et al., 2020), and medical officers (Mwangi et al., 2023). None of these studies were conducted in Eldoret. Few of the studies have undertaken an in-depth interview of the medical officers to provide a contextual understanding of their experiences with the pandemic. Therefore, understanding these factors is crucial for formulating effective strategies to support healthcare workers and enhance the overall response to the pandemic and future public health crises.

### 1.2 Research Objective

To determine the psychological effect of COVID-19 on health of medical personnel in hospitals in Eldoret town, Kenya

## II. LITERATURE REVIEW

### 2.1 Theoretical Review

#### 2.1.1 Conspiracy Theory and the COVID-19 Pandemic

The COVID-19 pandemic ushered in times of crisis (Van Prooijen & Douglas, 2017). Conspiracies are explanations or attempts to explain events that cannot be quantified or authenticated. Conspiracy theories emerge when the root cause and manifestation of an event cannot be proven beyond reasonable doubt. An event that cannot be explained through reference to existing knowledge may also be regarded as a conspiracy theory.

According to Leman and Cinnirella (2013), events necessitate explanations of comparable magnitude. There are several psychological advantages to providing explanations, one of which is giving those affected a feeling of control. Given this logic, it is imperative that one of the main causes of conspiracy beliefs is a lack of control at the source of the conspiracy. Even if patterns are an illusion, people make up for the lack of control they have in the real world by perceiving them in certain ways (Douglas et al., 2017). Conspiracy theories thrived well in the era of the coronavirus crisis (Sternisko et al., 2020). There was no easy mechanistic explanation for the disease, yet it was a massive occurrence with global ramifications.

Conspiracy theories help people maintain a state of equilibrium, hence control over an event. They serve psychological functions. However, conspiracy theories pose a threat to the understanding of a phenomenon because they shape individual behaviour during a crisis. Therefore, during the coronavirus pandemic, many scientists, particularly epidemiologists and physicians, articulated various information and ways to flatten the curve on COVID-19 in terms of infections and related deaths. Among other things, these modalities touched on conspiracy theories and pandemic behaviour related to COVID-19. Conspiracy psychologically, on the other hand, creates a widespread belief that powerful forces secretly rule the world (Imhoff & Bruder, 2014). It has been linked to widespread distrust of science as a whole (Imhoff & Lamberty, 2018) and, more specifically, the biomedical system (Oliver & Wood, 2014).

As a result, experts' recommendations to lower infection rates are especially unlikely to be trusted by conspiracy theorists.

The majority of people are more likely to conform to and adhere to social norms because they use information about how others act as a guide for their own behaviour. Imhoff and Erb (2009) posit that individuals with a strong need for uniqueness and a strong desire to stand out from the crowd deliberately try to avoid doing or saying what the larger groups of people do. Both correlational and experimental psychological studies reveal how conspiracy theories have been associated with a greater need for uniqueness (Imhoff & Lamberty, 2020; Lantian et al., 2017).

### 2.1.2 Stress, Appraisal and Coping Theory

The Stress, Appraisal, and Coping Theory was developed by Richard Lazarus and Susan Folkman in 1984. The theory provides a key framework for understanding the psychological well-being of medical personnel, especially during the high-pressure environment created by the COVID-19 pandemic (Lazarus & Folkman, 1984). Lazarus and Folkman highlighted the importance of cognitive appraisal in shaping individuals' responses to stressors (Ali et al., 2022). This theory suggests that stress is not solely a result of external factors like the difficulties presented by the pandemic but also depends on how individuals perceive and interpret these challenges (Rolin et al., 2022). Cognitive appraisal occurs at two levels: primary appraisal, where individuals determine whether the situation poses a threat or injury, and secondary appraisal, which involves evaluating the resources and options available for coping with the stress (Jiang & Wang, 2022). The theory outlines two main types of coping strategies: problem-focused coping, aimed at addressing or changing the stressor itself, and emotion-focused coping, which seeks to address the emotional reactions to the stressor (Shaikh, 2024). The stress and coping theory offered an insightful perspective for examining the psychological health of medical personnel in Eldoret Town. The researcher utilised this theory by initially evaluating how these professionals perceived the risks and challenges posed by working during a pandemic.

## 2.2 Empirical Review

According to Zandifar and Badrfam (2020), unpredictability, ambiguity, the severity of the illness, false information, and social isolation are factors that bring about stress and psychological morbidity. In order to reduce the psychological impacts of COVID-19, Zandifar and Badrfam emphasise the need for improved psychological health care for persons at risk of acquiring psychiatric problems, particularly in the susceptible population. Such people require counselling and guidance to help them manage anxiety and loneliness. Where stress is poorly managed, a person's state of equilibrium may be disturbed, leading to post-stress disorder characterised by anxiety. Shigemura et al. (2020) highlight the economic repercussions of COVID-19 and its effect on well-being. They note that there was an increased prevalence of phobic behaviours, such as hoarding and stockpiling, among the general population. According to Shigemura et al., the population that was most at risk of psychological distress, apart from the patients with COVID-19 and their families, were the medical personnel. Dong and Bouey (2020) observe that the increase in COVID-19 cases in some countries has resulted in significant psychological health crises. In places where this was not managed well at the initial stages of disease development, people handling COVID-19 patients tended to develop burnout as well as psychological disorders. Therefore, the rise of COVID-19 cases required urgent responses to alleviate stress among the health workers, such as allowing regular leave from work and periodic counselling.

Duan and Zhu (2020) categorically state that Western countries included psychological interventions in their management modalities for the COVID-19 outbreak. However, in countries like China, the issue of stress-related illnesses has not been adequately addressed, leading to the ongoing development and persistence of such conditions among affected individuals. Therefore, urgent measures were needed to help vulnerable people with psychological care by providing rest and clarity of information regarding COVID-19 and not misinformation. Bao et al. (2020), in a study, observe that China put in place mechanisms to help the general population reduce stress associated with outbreaks, along with information on the services that were already being offered. These measures included: (1) evaluating the veracity of information; (2) fostering social support; (3) lowering the stigma attached to the illness; (4) leading as normal a life as possible while adhering to safety precautions; and (5) using accessible psychological therapies, particularly online services, when necessary. These mechanisms were meant to enable society to respond to the COVID-19 pandemic in a healthy way. Similar tactics were undertaken in Singapore (Tan et al., 2020), which also covered the importance of improved psychological disorder screening, emphasizing agreement between locality and hospital services and giving appropriate information to the public in order to reduce unhealthy outcomes, such as panic and fearful paranoia about the illness and its spread. Lima et al. (2020) emphasise the importance of anxiety as the predominant emotional response to an outbreak, the necessity of providing healthcare professionals with adequate training, and the best possible use of technological advancements to provide psychological health care.

Asmundson and Taylor (2020) examined the effects of the COVID-19 pandemic on psychological health, considering health anxiety as a misconception or apprehension perceived by body sensations and changes. In lieu of

an outbreak of a communicable disease, particularly in the case of COVID-19, overrated information emanating from the media and health workers themselves creates enormous anxiety if not handled well. Such information also weakens individual psychological understanding of issues, and this is detrimental to health both physically and psychologically. At a local level within society, misinformation could lead to the undermining of specific knowledge within a population or group, as well as skepticism about public figures. At a personal level, this can manifest in harmful actions or responses in which individuals neglect certain activities that require urgent care, for instance, non-adherence to treatment and withholding of medically useful information (Nowak et al., 2020). It is important to priorities evidence-based research in the management of health anxiety.

Upon realizing that a health worker is at risk of developing a psychological disorder, it is prudent for authorities concerned to relieve the individual affected from duties and provide guidance or counselling for a period of time (Kang et al., 2020). According to Kang et al., psychological disorders among medical personnel during the pandemic often resulted from long working hours, loneliness, infection with COVID-19 by the health worker, inadequate personal protective equipment, misinformation regarding the disease, and the and the death of a relative or family member due to COVID-19.

Chen et al. (2020) argue that there is a misalignment between the services offered at a hospital and the needs of its medical staff. To support the psychological health of their workers, facilities need to implement a comprehensive approach, including the establishment of an intervention team for online resources, a psychiatric helpline, and group stress-reduction activities. Chen et al. also recommend the need for interaction or verbal exchange of ideas among the health workers. This may be enhanced by redesigning hospital infrastructure to include places where workers can rest and get their basic amenities, for instance, food, and to discuss their feelings and experiences in caring for patients.

### III. METHODOLOGY

#### 3.1 Study Area

The study was conducted in hospitals in Eldoret town, both public and private as shown in Table 1.

**Table 1**

*Hospitals and Accredited Levels*

Hospital	Accredited Level
Moi Teaching and Referral Hospital	(Level 6)
Mediheal Hospital	(Level 5)
St Luke's Orthopaedic and Trauma Hospital	(Level 5)
Racecourse Hospital	(Level 5)
Uasin Gishu County Hospital	(Level 4)
Eldoret Hospital	(Level 4)
Reale Hospital	(Level 4)
Elgon View Hospital	(Level 4)
Living Room Hospital	(Level 4)
Tophill Hospital	(Level 4)
Eldoret Oncology Associates	(Level 4)
Glogoh Hospital	(Level 4)
Cedar Hospital	(Level 4)
Lighthouse Healthcare	(Level 3)
Huruma District Hospital	(Level 3)
Pioneer Hospital	(Level 3)
Rapha Hospital	(Level 2)
Alexandria Cancer Centre and Hospital	(Level 2)

#### 3.2 Study Design

A cross-sectional descriptive research design was utilized to collect data on various variables related to the health of medical personnel during the pandemic. In a cross-sectional descriptive study, researchers collect data at a single point in time to provide a snapshot of a particular population.

#### 3.3 Target Population

The study targeted 379 medical personnel, comprising 34 doctors, 71 clinical officers, 219 nurses, and 55 laboratory technicians. This population was drawn from 3 public hospitals (122 personnel) and 15 private hospitals (257 personnel).

### 3.4 Sample Size Determination and Sampling Procedure

The snowball technique was used to select personnel who attended to COVID-19 suspected or confirmed patients. To build a snowball, one individual medical personnel who attended to a patient with a confirmed case of COVID-19 was given a questionnaire to fill out in their hospital setting. The medical personnel then referred the researcher to other medical personnel who did attend to a patient with COVID-19. From each category of medical personnel in both public and private hospitals, 50% were selected, in line with the recommendation by Kothari (2004). As such, the final sample size was 188, comprising 17 doctors, 35 clinical officers, 109 nurses, and 27 laboratory technicians.

### 3.5 Data Collection Instruments

The study employed questionnaires for data collection. Questionnaires were distributed to medical personnel working in hospitals in Eldoret town to gather information on the effects of COVID-19 on their health. The questionnaires consisted of both open and closed-ended questions regarding the psychological effects of CoVID-19 on the medical personnel.

### 3.6 Data Analysis

Quantitative data from questionnaires were analysed using IBM SPSS software. The psychological effect on health of medical personnel was analysed using descriptive statistics, linear regression and ANOVA to determine relationships between variables.

## IV. FINDINGS & DISCUSSIONS

### 4.1 Findings

#### 4.1.1 Response Rate

Out of the 188 questionnaires that were administered, 152 were filled and returned successfully. The 152 questionnaires filled and returned came from 90 nurses, 17 doctors, 25 clinical officers, and 20 laboratory technicians. This represented a response rate of 80.9 percent, which was considered sufficient for forming a good representation of the whole population. This response rate was well above the 50 percent recommended by Mugenda and Mugenda (2003).

#### 4.1.2 The Psychological Effects of COVID-19

The medical personnel were asked to indicate the psychological effects of COVID-19 that they experienced during the corona pandemic. Their respondents were scored on a four-point Likert scale and summarises as presented in Table 2.

**Table 2**

*Psychological Effect of COVID-19 on Health of Medical Personnel*

No	Item	Strongly Agree (%)	Agree (%)	Disagree (%)	Strongly Disagree (%)	Mean	Std. Dev.
1	I generally expressed feelings of stress due to the advent of the COVID-19 virus	33.3	44.4	18.9	3.3	1.92	.810
2	There was anxiety centred on fear of my own health, my colleagues and families regarding COVID-19	25.6	21.1	45.6	7.8	2.36	.952
3	Contact with COVID- 19 patients or suspected cases made me to be depressed	30.0	14.4	34.4	21.1	2.47	1.134
4	I felt hopelessness whenever a patient succumbed to death as a result of COVID-19	35.6	34.4	26.7	3.3	1.98	.874
5	I felt irritable or mood swings during this time	28.9	66.7	1.1	3.3	1.79	.627
6	constant news and updates about COVID-19 affected you	57.8	30	7.8	4.4	1.59	.820
7	I had concerns about the long-term effects of the pandemic	48.9	41.1	6.7	3.3	1.64	.754

Table 2 presents insights into the psychological effects of the COVID-19 pandemic on the health of medical personnel, based on responses gathered from the study. From the study results, 77.7% of respondents either strongly agreed (33.3%) or agreed (44.4%) that they generally experienced stress due to the onset of the COVID-19 virus. This

indicated that a significant majority of medical personnel were profoundly affected by the pandemic, reflecting a prevalent emotional response among healthcare workers.

Additionally, a notable portion (25.6%) strongly agreed, and 21.1% agreed that they experienced anxiety centred on fear of their own health, colleagues, and families due to COVID-19. However, a substantial number (45.6%) disagreed to some extent, suggesting varying levels of concern and coping mechanisms among respondents.

Regarding depression resulting from contact with COVID-19 patients or suspected cases, 30.0% of respondents acknowledged feeling depressed (30.0% strongly agreed, 14.4% agreed). Conversely, 21.1% strongly disagreed, indicating diverse emotional responses among healthcare workers to patient interactions during the pandemic. Further, feelings of hopelessness were recognized by 35.6% (strongly agreed) and 34.4% (agreed), while 29.8% disagreed or strongly disagreed. This highlighted the emotional toll of losing patients to COVID-19 on medical personnel, showcasing varied responses to the challenges faced in healthcare settings.

A majority (66.7%) strongly agreed that they experienced irritability or mood swings during the pandemic, indicating significant emotional volatility among respondents in their day-to-day experiences. The respondents also revealed that the constant influx of COVID-19 news and updates affected 87.8% of them to some extent, with 57.8% strongly agreeing and 30% agreeing. This underscored the pervasive influence of media coverage on the emotional well-being of medical personnel, highlighting how external information sources contribute to their emotional state.

Concerning long-term effects, nearly 90% of respondents expressed worries about the enduring consequences of the pandemic, with 48.9% strongly agreeing and 41.1% agreeing. This suggested a high level of apprehension among healthcare workers regarding the lasting impact of COVID-19 on both personal and professional aspects of their lives.

The findings were in line with the study conducted by Zandifar and Badrfam (2020), which found that unpredictability, ambiguity, the severity of the illness, false information, and social isolation are factors that bring about stress and mental morbidity. In order to reduce the psychological effect of COVID-19, Zandifar and Badrfam emphasise the need for improved mental health care for persons who are vulnerable to acquiring psychiatric problems, particularly in the susceptible population. This can only happen when people who are identified as vulnerable receive counselling and guidance to better manage anxiety and loneliness. Such measures will help alleviate psychological stress and enable medical personnel to cope with the demands of their work.

The data presented strongly indicates that there was a significant psychological effect of COVID-19 on the health of medical personnel in hospitals in Eldoret town. The inferential statistics revealed a range of emotional responses that underline the profound impact of the pandemic on healthcare workers. The overwhelming majority reported experiencing stress as a result of COVID-19, which reflects a significant emotional burden. The fact that a majority either strongly agreed or agreed highlights the widespread nature of the stress experienced among medical personnel. The study also found that while a notable portion of respondents expressed anxiety about their own health and that of colleagues and family, a large percentage also reported disagreement regarding their level of anxiety. This suggests variability in responses and coping mechanisms. It also still indicates that a substantial number of healthcare workers grapple with anxiety. The acknowledgement of feelings of depression among a high number of respondents demonstrated a significant psychological impact, particularly associated with the stress of patient interactions related to COVID-19.

The high percentage of respondents feeling hopeless due to patient deaths underscored the emotional toll that loss takes on healthcare workers. The prevalence of irritability and mood swings in a significantly high number of respondents suggested high levels of emotional volatility and possibly burnout among medical personnel. The overwhelming influence of continuous COVID-19 news indicated that external factors, such as media coverage, also contributed to the psychological strain experienced by healthcare workers. Nearly 90% of respondents concerned about the long-term effects of the pandemic signalled high levels of apprehension regarding their mental health and job security after the crisis, which was indicative of sustained psychological stress.

#### **4.1.3 Health of Medical Personnel in Hospitals in Eldoret Town, Kenya**

The dependent variable in this study was the health of medical personnel. The outcome variable was measured through indicators such as infection rates, severity of symptoms, recovery time, and any long-term effects (LTE) on their overall well-being (Nguyen et al., 2020). As shown in Table 3, medical personnel categorized with a high health level experienced significantly higher infection rates (79.6%) and severity of symptoms (80.3%) compared to those with a low health level, who had lower infection rates (20.4%) and severity (19.7%). Despite this, those with a high health level exhibited a markedly shorter recovery time (30.9%) and a lower incidence of long-term effects (15.8%). In contrast, personnel with a low health level, while less likely to be infected or experience severe symptoms had a longer recovery time (69.1%) and a much higher likelihood of experiencing long-term effects (84.2%).

These statistics highlight the intricate link between the beginning state of health and the results that occur over a long period of time. Although those with better levels of health appear to have a greater vulnerability to infection



and severe symptoms, they also experience quicker recovery and a reduced probability of experiencing long-term health consequences. This contradictory result may be attributed to the heightened psychological and physical pressures experienced by individuals in better health, who are more prone to being at the forefront and thus facing greater exposure and stress. The study's findings highlight the significant psychological burden experienced by medical personnel, regardless of their initial health status. The high levels of stress, anxiety, depression, hopelessness, and irritability reported in the study underscore the need to address both immediate and long-term health consequences in this population.

**Table 3**  
*Dependent Variable Categorized*

Health level	Infection rates	Severity of symptoms	Recovery time	LTE
High	79.6%	80.3%	30.9%	15.8%
Low	20.4%	19.7%	69.1%	84.2%

**4.1.4 Regression Analysis**

Linear regression analysis was conducted to determine the psychological effects of COVID-19 on the health of medical personnel. Table 4 presents the findings.

**Table 4**  
*Linear regression analysis model summary of psychological effects of COVID-19 on health of medical personnel*

Model Summary <sup>b</sup>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.646a	0.417	0.41	2.85537

- a. Predictors: (Constant), Independent\_psychological\_effects
- b. Dependent Variable: Dependent\_health\_medical\_personnel

As shown in Table 4, the R value was 0.646. R is a measure of the correlation between the observed value and the predicted value of the dependent variable. Thus, 0.646 is the correlation coefficient between the levels of health of medical personnel as reported by the respondents and the levels that would be predicted by the predictor variables. The score of 0.646 suggests a moderately strong positive relationship between the reported levels of health of medical personnel and the levels predicted by the predictor variables. This implies that the predictor variables used in the analysis had a significant influence on the health levels of medical personnel as reported by respondents. In the model,  $R^2 \times 100 = .417 \times 100\% = 41.7\%$ , indicating that 41.7% of the variance in the dependent variable was explained by the independent variables in the study. The R-square value indicated that this model succeeded in predicting up to 41.7% of the variables in the health wellbeing of the nurses. Up to 41.7% of the variation seen in the area under study was accounted for by the psychological effects of COVID-19. Table 5 presents the ANOVA output analysis.

**Table 5**  
*ANOVA Output Analysis*

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	513.012	1	513.012	62.922	.000 <sup>b</sup>
	Residual	717.477	88	8.153		
	Total	1230.489	89			

- a. Dependent Variable: Dependent\_health\_medical\_personnel
- b. Predictors: (Constant), independent\_psychological\_effects

Regression coefficients were used to find out if psychological effects of COVID-19 had statistically significant effects on health of the medical personnel.

**Table 6**  
*Regression Coefficients*

Model		Coefficients <sup>a</sup>				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	15.819	1.504		10.515	.000
	Independent_psychological_effects	1.441	.182	.646	7.932	.000

a. Dependent Variable: Dependent\_health\_medical\_personnel

The fitted regression equation  $Y = \alpha + \beta X$  was:

$$Y = 15.819 + 1.441X$$

Where:

Y is the dependent variable (health of medical personnel)

X psychological effects of COVID-19.

According to the regression equation established, taking all other factors into account (psychological effects of COVID-19) constant at zero, the health of medical personnel is 15.819.

## 4.2 Discussions

The study of the psychological effect of COVID-19 on medical personnel in hospitals in Eldoret town provides valuable insights into the significant emotional burden experienced by medical personnel during the pandemic. The prevalence of stress among medical personnel, with a majority reporting experiencing stress due to the onset of the COVID-19 virus, underscores the overwhelming nature of the pandemic and its impact on the psychological well-being of medical personnel. This finding is consistent with previous research highlighting the increased stress levels among medical personnel during public health emergencies (Maunder et al., 2003).

Similarly, the high levels of anxiety reported by respondents, with a notable portion expressing fear about their own health, colleagues, and families, reflect the constant apprehension and worry faced by medical personnel in high-risk environments. This finding aligned with studies that have documented elevated levels of anxiety and fear among healthcare workers during infectious disease outbreaks (Kang et al., 2020). The findings on depression resulting from contact with COVID-19 patients or suspected cases highlight the emotional toll of caring for infected individuals and the challenges of coping with patient interactions during the pandemic. This was in line with research demonstrating the increased risk of depression and emotional distress among healthcare workers exposed to high levels of stress and trauma (Pfefferbaum & North, 2020).

The study also revealed the impact of patient deaths on medical personnel, with a significant proportion of respondents acknowledging feelings of hopelessness. This underscored the emotional strain of losing patients to COVID-19 and the need for adequate support and coping mechanisms to address the grief and distress experienced by medical personnel (Lai et al., 2020). The findings on irritability and mood swings among respondents further highlighted the emotional volatility and strain experienced by medical personnel in their day-to-day interactions and responsibilities. This aligned with previous research showing that prolonged exposure to stressful situations can lead to mood disturbances and emotional dysregulation among medical professionals (Shanafelt et al., 2020).

The study findings also emphasised the impact of media coverage on the emotional well-being of medical personnel, with a significant majority of respondents having been affected by constant news updates about COVID-19. This underscored the need for healthcare organisations to provide accurate information and support to help medical personnel navigate the influx of media coverage and mitigate its impact on their mental health (Kang et al., 2020). Furthermore, the concerns about the long-term effects of the pandemic expressed by nearly all of the respondents highlighted the ongoing apprehension and uncertainty faced by healthcare workers regarding the lasting consequences of COVID-19. This underscored the importance of addressing the psychological well-being of medical personnel and implementing strategies to support their psychological health in the face of prolonged stress and uncertainty (Greenberg et al., 2020).

## V. CONCLUSIONS & RECOMMENDATIONS

### 5.1 Conclusions

COVID-19 had profound psychological effects on health of medical personnel in hospitals in Eldoret Town. The pandemic led to widespread stress, anxiety, depression, and feelings of hopelessness among medical personnel. Emotional volatility, exacerbated by media updates and concerns about long-term effects, underscored the complex challenges faced by medical personnel during the crisis. The study underlines the need to address these psychological impacts through targeted mental health support programmes, resilience-building initiatives and effective



communication strategies to support the well-being and resilience of healthcare teams during and after the pandemic. Efforts to provide comprehensive support aimed at mitigating stress, fostering emotional resilience, and promoting a supportive work environment are essential in helping healthcare workers cope with the demands of their roles and preparing for future health emergencies.

## 5.2 Recommendations

Based on the findings and conclusions of the study, there is a need to implement and expand psychological support programmes tailored to the needs of medical personnel. Medical personnel should be provided access to counselling services, stress management workshops, and peer support groups to address psychological challenges identified in the study. The study findings also have significant policy implications for Eldoret Town legislators. They underscore the necessity of focused legislative initiatives to enhance healthcare professionals' resilience and well-being in the face of COVID-19 pandemic. The analysis makes clear that comprehensive healthcare worker support programmes are desperately needed. These programmes should include wellness activities, mental health services and efficient tiredness management techniques. In order to guarantee support programmes are available, well-funded and incorporated into healthcare system, policymakers need to allocated resources that geared towards managing emergencies in health care system. Policymakers can lessen the effects of pandemic-related stressors and encourage a sustainable workforce by placing a high priority on the well-being of medical personnel.

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