



Staffs Survival Associated Behavioural Factors of COVID-19: A Systematic Review

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Abstract: The study review staff survival-associated behavioral factors of covid-19. The study reviews people's knowledge of COVID-19, People's Perceptions of the Possible Causes of COVID-19, and People's Attitudes toward Staffs Survivors of COVID-19, Management Associated Factors, Facility Associated Factors, and The Impact of Stigmatization among Staffs survivors from COVID-19, and Control of Stigmatization among Staffs Survivors of COVID-19. The COVID-19 pandemic has had a significant impact on individuals and societies worldwide, including Ghana. Staff members, especially those in healthcare settings, have been at an increased risk of infection due to their frequent exposure to the virus. Several behavioral factors have been associated with the survival of staff members in Ghana during the COVID-19 pandemic. The survival of staff members in Ghana during the COVID-19 pandemic is associated with several behavioral factors, including adherence to preventive measures, timely testing, and isolation, adequate training and provision of PPE, mental health support, and support from employers.

Keywords: COVID-19, staff, associated Behavioural factors, the impact of stigmatization

1. Introduction

On December 31, 2019, the World Health Organization (WHO) was informed of a cluster of pneumonia cases in Wuhan City, Hubei Province of China. Illnesses have since been linked to a disease caused by a previously unidentified strain of coronavirus, designated Coronavirus Disease 2019, or COVID-19.

The disease has spread to several other countries, including the United States. As of March 2, 2020, tens of thousands of people have been infected and over 2,500 have died. Both WHO and the U.S. Centers for Disease Control and Prevention (CDC) post frequent updates on the outbreak (No et al., 2020). The COVID-19 pandemic is taking a tremendous toll on humanity.

This is evident not only in terms of the significant loss of life but also in the negative impact on the world economy caused by the uncertainty and disruptions to economic activities related to the lockdown and other containment measures (No et al., 2020).

The novel coronavirus (2019-nCoV, or COVID-19) epidemic first broke out in Wuhan and has been spreading in whole China and the world. The number of new infections and deaths in Wuhan is still increasing, which has posed major public health and governance concerns. A series of mandatory actions have been taken by the municipal and provincial governments supported by the central government, such as measures to restrict travel across cities, case detection and contact tracing, quarantine, guidance and information to the public, detection kit development, etc. Challenges such as lacking effective drugs, insufficient hospital services and medical supplies, logistics, etc. have much alleviated with the solidarity of the whole society. The pandemic will be ended with the continuous efforts of both national and international multispectral bodies (Zhu et al., 2020).

Indians back home experienced being stigmatized by their neighbors when their homes were stamped "quarantined." Home-quarantined individuals have reported 13 similar experiences when the Delhi Government decided to put up notices outside their homes (Bhattacharya et al., 2020). Strengthened surveillance was implemented in France on 10 January 2020 to identify imported cases early and prevent secondary transmission. Three categories of risk exposure and follow-up procedure were defined for contacts (Stoecklin et al., 2020). Recently, the outbreak of various infectious diseases has significantly affected the lives of millions of people. These diseases have not only strained our medical and public health facilities but also burdened economists, scientists, and politicians in responding to financial hardships, the discovery of vaccines, and dealing with public anxieties and expectations, respectively (Khan & Khan, 2021). On January 31, 2020, after 102 years from the Spanish flu pandemic, with an estimated number of Italian deaths of 410,000 in 1918 (which raised to 466,00 up to 1920) the first two confirmed cases of infection due to 2019-nCoV were reported in Rome, Italy (Santacroce et al., 2020) and also February 22, 2020, a total of 9 cases (including 6 new diagnosed) and the first death of a patient were confirmed in Italy. Italy was not unprepared for an epidemic when the first news

bulletins came from China (Africa & Maluleke, 2020).

According to Ortenzi et al., (2020) study conducted in Italy reported its first two cases of COVID-19 at the end of January 2020, and approximately a month later the epidemic spread quickly in the Italian population. As of 27 March, Italy reported 80,589 cases. It was the third country worldwide in terms of total number of cases, after the USA and China, despite its markedly smaller population size (Ortenzi et al., 2020). The Italian case can provide some useful insights for the overall understanding of the pandemic, and analyzing its epidemiological situation, as well as interventions taken and their expected impact (both in terms of disease spread and socio-economic consequences) may contribute to generating questions and hypotheses.

On 5 March 2020, South Africa recorded its first case of imported COVID-19. Since then, cases in South Africa have increased exponentially with significant community transmission (Moonasar et al., 2021). The pandemic reached South Africa later than most of the world, but despite the delay, it has still had a wide-reaching impact on all South Africans. President Ramaphosa declared a state of national disaster on 23 March 2020 and indicated that there would be a total national lockdown of the country starting on 26 March 2020 to curb new infections and flatten the curve of the virus (Africa & Maluleke, 2020). Between March and August, South Africa reported the highest number of cases on the African continent. In this paper, the measures taken by South Africa to contain the spread of COVID-19 and to mitigate its effects are described (Moonasar et al., 2021).

On 12 March 2020, Ghana recorded its first two cases of the coronavirus (Ghana Health Service (GHS, 2020). In a statement issued by the Ministry of Health, both individuals returned to Ghana from Norway and Turkey. Following the first cases, the country witnessed a slow steady increase also imported in the country. On 21st March 2020, after having recorded 21 cases, the President in a national address restricted travel by ordering the closure of Ghana's sea, land, and air borders to human traffic effective from midnight of 22nd March 2020 (KPMG, 2020). The restrictions on travel and the closure of borders continued until it was reviewed on 1st September 2020. In an address to the nation on 30th August 2020, the President of Ghana announced that air borders were reopening to human traffic from the 1st of September 2020. The President

further announced that land and sea borders continue to remain closed until further notice (Antwi-boasiako et al., 2021).

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Over 26 million recovered COVID-19 patients will suffer from discrimination in work, education, and social interactions. We analyzed the determinants of discrimination against recovered COVID-19 patients and suggest policy recommendations to reduce such discrimination (Liu et al., 2022). Research about the coronavirus disease 2019 (COVID-19), it is epidemiology and socio-economic impact on populations worldwide have gained attention. However, there is a dearth of empirical knowledge in low- and middle-income settings about the pandemic's impact on survivors, particularly the tension of their everyday life arising from the experiences and consequences of stigma, discrimination, and social exclusion, and how they cope with these behavioral adversities (Atinga et al., 2021).

Stigma against survivors of Covid-19 (and their families) has emerged as a major issue in Ghana, which in turn affects our response. There exist widespread misconceptions and fear of people who have recovered from Covid-19, as they are believed to pose a health risk to others. Survivors of Covid-19 are widely avoided and stigmatized. As a result, people with Covid-19 symptoms are often reluctant to be tested, for

fear of being stigmatized if the result is positive. To address the stigma against Covid-19 survivors, Plan International Ghana collaborated with a local filmmaker and the Ministry of Health to produce a powerful video showing the harmful effects of stigma. The video can be viewed here (*Addressing Stigma against Covid-19 Survivors in Ghana*, 2020).

2. People's Knowledge of COVID-19.

The world is currently facing a serious pandemic caused by a novel coronavirus that was first isolated on December 21, 2019. According to Yang et al., (2021), a study reported that, during the COVID-19 pandemic, self-reported IPC behaviors among HCWs were better than before, whereas compliance with goggles and gown use was not very satisfactory. Environment context and resources, knowledge, emotion, and social influences were identified as determinants of IPC behaviors. HCWs in high-risk departments had better behaviors of gown use, whereas HCWs who had encountered confirmed or suspected patients reported worse behaviors of goggles and gown use (Yang et al., 2021). To improve HCWs' IPC behaviors in response to the COVID-19 pandemic or possible future epidemics, policymakers and authorities should invest in education and create employment opportunities for HCWs to improve global health security in the long term (WHO, 2016). For HCWs, it is important to constantly learn knowledge and implement the IPC guidelines (Yang et al., 2021).

Healthcare workers valued support from their organizations but gave many examples of not feeling adequately supported. Some workers reported feeling coerced into working with infected patients or in inappropriate conditions (Stoichitoiu & Baicus, 2021). Participants across most studies felt that their organizations had an institutional duty to provide staff with sufficient protection to work safely. Workers reported feeling supported by their organizations when there was clear alignment and shared decision-making between senior managers and frontline healthcare workers but less supported when staff safety was not a clear priority. Workers also valued their organisations supporting them to take time off from their roles. Workers' perceptions of their organization's preparedness varied with workers in several studies reporting a lack of established protocols. Staff in some studies commented on hoping that their organizations

would learn from these experiences and be better prepared in the future.

Effective management was promoted by greater involvement of all staff in sharing learning and knowledge of the outbreak, developing trust and teamwork, and fostering collective leadership (Al Knawy et al., 2019).

A study conducted by Greenberg & Tracy, (2020), encourages healthcare leaders to follow the preventive medicine evidence; ensure their staff are properly prepared for their role practically and psychologically, provide basic equipment and training, empower teams to support each other with a particular focus on helping supervisors feeling confident to speak to team members about their mental health. Leaders must provide staff with frank information about what lies ahead while simultaneously positively emphasizing how important their roles are and the organization's honest commitment to support them. This helps individuals make informed choices about their role suitability and to prepare cognitively, emotionally, and practically. Additionally, the provision of coping skills training ('psychological PPE') may help foster resilience, although evidence that it prevents longer-term mental ill health is lacking. (Greenberg & Tracy, 2020).

Research on the effectiveness of leaders during and after the COVID-19 crisis should examine an array of activities, including the degree to which remote leaders are persuasive if they (a) clearly state their values that will guide institutional actions; (b) understand and openly discuss the travails and hopes of their organizations; (c) communicate an ambitious vision of the direction that the unit will head toward; and, (d) demonstrate confidence that strategic goals can be achieved. These skills are referred to as charisma (Grabo, Spisak, & Van Vugt, 2017) and require training and investment. Indeed, crises can bring about changes in leadership styles (Stoker, Garretsen, & Soudis, 2019); thus, firms can expect to be better prepared by ensuring they have adequately invested in professional development.

Among the more specific leader-subordinate activities that will be important to consider concerning, COVID-19 is how assessment and appraisal systems will function. For example, without being able to directly monitor subordinates in the way that office settings allow, there may be a shift to results-focused assessment, which prior research shows to be generally

effective (Pritchard et al., 2018). Over longer periods, though, working remotely may reduce the opportunities for subordinates to gain feedback from leaders and prior research suggests that a lack of learning opportunities is associated with lower organizational commitment and a higher risk of turnover (Vandenberghe et al., 2019). In addition, future research should examine how trust can be built remotely with online interactions so that newcomers are not disadvantaged due to the lack of face-to-face interactions with their leaders (Dunbar, 2018). Participants in many of the studies talked about experiencing stigma because of working during the pandemic. This was greatest in the earlier phases of the outbreaks or in contexts where less was understood about the transmission of the virus (Al Knawy et al., 2019).

According to Atinga et al., (2021) study conducted on recovered but constrained: narratives of Ghanaian COVID-19 Survivors' experiences and coping pathways of Stigma, Discrimination, Social Exclusion, and their sequels prejudices linked to social stigmatization was widely reported. A cross-section of the participants reported experiencing sudden social disapproval within the community. Socially unwelcoming behaviors, cold moods, and negative perceptions toward participants were reported. Socially undermining behaviors that purportedly discouraged participants in many ways. The first was the loss of respect because elements of the labeling made participants less worthy of attention. Second, the fact that participants were perceived as health threat dented their reputation and decision space (Atinga et al., 2021). A study conducted by (Shrestha et al., 2021), indicated that proper and adequate knowledge and attitude towards COVID-19 is paramount in the prevention and control of SARS-COV-2 among health workers. Healthcare workers are knowledgeable about COVID-19 and are proactively practicing preventive measures to minimize the spread of infection but some lack an optimistic attitude. Hence, the constantly updated educational programs related to COVID-19 will surely contribute to improving the healthcare workers' knowledge and attitude towards COVID-19.

The disease was spread from patients who were in contact with the Huanan Seafood Market (in Wuhan, China), which is widely known to be the origin of this pandemic (Sakr et al., 2021). World Health Organization (WHO) on 30th January 2020 declared

the outbreak as a public health emergency of international concern and described it as a pandemic on March 11, the same year. As of 16th May 2020, the highly contagious disease had infected 4,647,960 people globally with a loss of 308,985 lives; Africa had recorded 80,171 COVID-19 cases and 2,653 deaths, with Ghana recording over 5,638 cases and 28 deaths. These presentations are similar to the severe acute respiratory syndrome (Peer-reviewed, 2020). The incubation period of COVID-19 is usually between 2-14 days and presents common symptoms such as fever, dry cough, feeling of tiredness and shortness of breath (Akunvane & Akparibo, 2020). Coronavirus disease 2019 (COVID-19) is an emerging respiratory disease caused by severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2), which is a single-strand, positive-sense ribonucleic acid (RNA) virus (Tii et al., 2021). This virus has since been named severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) following the most recent World Health Organization (WHO) guidelines (Sakr et al., 2021).

Coronavirus disease 2019 (COVID-19), which is caused by SARS-CoV-2, is reported by the WHO to be triggered by the inhalation of contaminated droplets with viral particles or by touching the nose, mouth, and eyes after a person's hands come in contact with contaminated surfaces. In addition, transmission via aerosols and fecal-oral routes is also suspected (Sakr et al., 2021). Ever since the first case of the novel coronavirus (SARS-CoV-2) was notified in Ghana on March 12, 2020, a total of 95,476 laboratory-confirmed infections have been reported from 1,264,190 samples tested, giving a daily confirmed case of 3,011 per million population as of June 29, 2021 (Agbozo & Jahn, 2021). While scientific investigations are ongoing to develop effective management through medications and vaccines and existing, knowledge could be harnessed to develop an effective strategy to curb community transmission of COVID-19 (Peer-reviewed, 2020). The COVID-19 pandemic has affected populations globally, including Ghana. Knowledge of the COVID-19 disease and the application of preventive public health interventions are pivotal to its control (Yeboah et al., 2021). Despite this level of knowledge, there was a certain low willingness to comply with the COVID-19 preventive practices/measures to counteract the pandemic and a low inclination for vaccination (Yeboah et al., 2021).

Knowledge of COVID-19 is sub-optimal and knowledge of transmission and preventive measures should be improved in the general population cognizant of cultural norms and Islamic practices. The study also highlights the importance of considering belief systems and perceptions in developing control measures against COVID-19 (Yeboah et al., 2021). Individuals have low levels of knowledge regarding COVID-19 therefore health education programs, mainly targeting individuals with less knowledge about COVID-19, are essential to encourage positive attitudes and maintain safe practices. Health education is an essential public health tool in combating emerging diseases, such as infection by the new coronavirus. (Abdulrazaq et al., 2021). Knowledge of COVID-19 is sub-optimal and knowledge of transmission and preventive measures should be improved in the general population cognizant of cultural norms and practices. However, we will highlight the importance of considering control measures against COVID-19. COVID-19. Knowledge may increase significantly if health education programs are specifically targeted at vulnerable populations (Al-hanawi, 2020). The Ministry of Health and the Ghana Health Service have used television, radio, and social media to educate the citizenry about the virus, and this has informed our assumption and argument of increased access to COVID-19 information among the general public (Akunvane & Akparibo, 2020). Since knowledge of COVID-19 is limited, information sharing is crucial to avoid rumors and misinformation. Information shared must be supported by scientific evidence. The most important thing to do is to disseminate accurate and community-specific information about the affected area, individual and vulnerable populations to COVID-19, treatment options, and where people can access healthcare facilities and the right information by using simple language and avoiding medical terms (Anant & Rajasekharan, 2020).

3. People's Perception of the Possible Causes of COVID-19

The COVID-19 pandemic has created a crisis in health systems worldwide. In recent days we have witnessed a fast increase in infections caused by this disease, whose prevalence and incidence have become a worldwide public health problem, where high mortality and morbidity have been evidenced (Huánuco, 2021). Despite the level of advancement in health systems in high-income countries, they appeared to be the worst

hit in terms of disease burden and total COVID-19-related deaths (Hager et al., 2020). A study in India reported that the knowledge and practice towards the COVID-19 pandemic among people is good but still, there was a gap in right perception. Similarly, in the USA and the UK, people had important misconceptions about COVID-19 whereas, in Nepal, a study reported that the overall knowledge of COVID-19 was high and the majority of people had a positive perception towards universal safety measures (Bhatt et al., 2020). Perceptions can vary among individuals, and there is no single truth as it will vary from region to region and country to country; therefore, the facts perceived by individuals may differ (Gurbuz et al., 2021).

Individuals express worries about how COVID-19 has negatively affected their daily lives and activities. Some of the ways by which the pandemic affected the daily activities of individuals were a general slowdown of business, especially among traders and store operators, inability to work due to restrictions in movement, fear of contracting the infection, and the fact that children cannot attend school as they used to. (Ahorlu et al., 2022). The pandemic and lockdown on the public are enormous: people opined that the disease and its consequences reduced social interaction, exacerbated the economic crisis, increased psychological effects (fear, anxiety, and depression), and also changed the lifestyle of the people in many ways (Bhatt et al., 2020). This distrust in the management of the pandemic might also be due to the low testing capability, and lack of strict enforcement of the compulsory lockdown. More so, in many African countries, reports of porous borders, congested cities, increased hunger and poverty, poor health literacy, and expensive facemasks and hand sanitizers have all been obstacles to control measures (Hager et al., 2020). There are differences in the perspectives of individuals living in different countries according to the items relating to COVID-19. Perceptions can vary among individuals, and there is no single truth, as it will vary from region to region, and country to country; therefore, the facts perceived by individuals may differ (Gurbuz et al., 2021).

According to (Gurbuz et al., 2021) the vast majority of individuals from different countries, curfew restrictions can be applied as a precaution to reduce the transmission rate of the virus. People should be more informed, especially by international health organizations (IHO) and updated information should be

made available to people constantly. However, less than half of the participants were engaged in good COVID-19 preventive practices (Tii et al., 2021). Therefore, the World Health Organization (WHO) insisted on strengthening the effective monitoring of cases, early detection, isolation and management of such cases, follow-up of patients, and prevention of the spread of the virus (Huánuco, 2021). The virus is primarily spread through contact with small droplets produced from coughing, sneezing, or talking by an infected person. While a substantial proportion of infected individuals may remain asymptomatic, the most common symptoms in clinical cases include fever, cough, acute respiratory distress, fatigue, and failure to resolve over 3 to 5 days of antibiotic treatment. Complications may include pneumonia and acute respiratory distress syndrome (City et al., 2020). The knowledge of COVID-19 may be indeed the result of general alertness due to other outbreaks having affected Ghana in the past (influenza and cholera). Despite this level of knowledge, there was a certain low willingness to comply with the COVID-19 preventive practices/measures to counteract the pandemic and a low inclination for vaccination. (Yeboah et al., 2021). Females had a significantly higher perception of the danger of infection by COVID-19 than males (Sakr et al., 2021).

4. People's Attitude towards Staffs Survivors of COVID-19

COVID-19 discrimination by other countries, contact with people with COVID-19, and worries (Wang et al., 2021). COVID-19 effects do not limit to those infected by the virus. It affects Society as the virus has significant implications for people's lives in general. Therefore, since the COVID-19 emergence in Wuhan City, China, in 2019, there has been an intense mobilization of the scientific community to understand the virus better and develop effective treatments and/or vaccines to curb the evolution of the pandemic and achieve the long-awaited return to normality (Lima et al., 2021). There are regulatory and legal provisions against discrimination and stigma of healthcare workers and other forces involved in the pandemic response (Roy et al., 2021).

Although vaccines for COVID-19 are now available, it is not clear if vaccines can prevent transmission of the virus. Therefore, practicing COVID-19 preventive measures is critical in the control of the COVID-19 pandemic. Accordingly, various interventions have

been implemented globally such as partial lockdowns, contact tracing, self-isolation or quarantine, and promotion of public health measures including hand hygiene, respiratory protocols, and social distancing to curb the spread of the virus (Tii et al., 2021). At the beginning of the epidemic, the government imposed different measures such as partial lockdowns such as closed borders, creating testing and treatment centers as well as announced rules to prevent the spread of COVID-19 related to social distancing and the use of personal protective equipment (PPE) (Sakr et al., 2021). Ghana reported its first case of COVID-19 on 12th March 2020 in its national capital, Accra. Cases of COVID-19 have since spread to all regions of the country, and as of 8th April 2021, Ghana has recorded a total of 91,109 cases and 752 deaths. Ghana has adopted several measures to fight the virus namely; testing, tracing, and treating, the partial lockdown of some major cities, and practicing COVID-19 safety measures. It has also resorted to the use of geospatial technology in its effort to enhance contact tracing and improve decision-making. Successful control of COVID-19 infection will require a change of individual behavior, and this is influenced by people's understanding of the characteristics of the disease and its preventive measures. (Tii et al., 2021).

Discrimination against recovered COVID-19 patients can cause anxiety, mental health problems, and social isolation. Some current COVID-19 patients may conceal their disease, fearing discrimination, which delays their treatment and imposes barriers to COVID-19 control and prevention. Excessive fear, and unequal treatment, of recovered COVID-19 patients occur despite the absence of any evidence that recovered COVID-19 patients infect other people. Discrimination against recovered COVID-19 patients has the potential of morphing (Change) into a long-run major social problem, overshadowing previous infectious diseases emergencies, such as hepatitis B virus (HBV), severe acute respiratory syndrome (SARS) and human immunodeficiency virus (HIV) (Liu et al., 2022). People should be more informed, especially by international health organizations, and updated information should be made available to people constantly. Although people have different religious structures, it can be said that they show a common approach to the virus. Global organizations need to be in great cooperation. Thus, people can access real and reliable information instead of believing in conspiracy

theories. (Gurbuz et al., 2021). The President of the Republic of Ghana through his monthly update on the COVID situation, persistently called on citizens and people living in Ghana particularly schools to observe the measures/protocols being implemented by the Government to combat the pandemic. This might have led to the people's increased knowledge of the COVID-19 symptoms, transmission, and preventive measures. One other possible explanation might be that the individuals had increased access to available information above COVID-19. (Akunvane & Akparibo, 2020).

5. Management Associated Factors

Hospitals play a critical role within the health system in providing essential medical care to the community, particularly in a crisis. Prolonged and combined outbreaks can lead to the progressive spread of disease with rapidly increasing service demands that can potentially overwhelm the capacity of hospitals and the health system at large. To enhance the readiness of the health facilities to cope with the challenges of the outbreak, a pandemic, or any other emergency or disaster, hospital managers need to ensure the initiation of relevant generic priority action. This document aims to provide a checklist of the key action to take in the context of a continuous hospital emergency preparedness process (HOSPITAL READINESS, 2020).

Health System Strengthening: Human resource and institutional capacity are key to addressing the COVID-19 outbreak as well as strengthening health systems to ensure the constant provision of general health services without disruption (Health, 2020). Well-maintained Infrastructure, adequate & skilled human resources, functional equipment & instruments, and sufficient drugs & consumables ensure the fulfillment of the 'Structural' requirements for a well-functional COVID care facility. According to Yang et al., (2021) study in Wuhan, China, on covid-19 stated that increasing health human resources would reduce HCWs' workload, thereby improving IPC behaviors. For healthcare facilities, adequate personal protective materials, education and training, supervision and role model setting may be essential (Yang et al., 2021).

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However, for attaining enhanced satisfaction with improved clinical outcomes, it becomes equally pertinent to ensure 'Quality' in the 'Processes' of care (Welfare, 2021). The Occupational Safety and Health Administration (OSHA) developed this COVID-19 planning guidance based on traditional infection prevention and industrial hygiene practices. It focuses on the need for employers to implement engineering, administrative, and work practice controls and personal protective equipment (PPE), as well as considerations for doing so.

This guidance is intended for planning purposes. Employers and workers should use this planning guidance to help identify risk levels in workplace settings and to determine any appropriate control measures to implement. Additional guidance may be needed as COVID-19 outbreak conditions change, (Document et al., 2020). Patients with certain underlying comorbidities are at a higher risk of progressing to severe COVID-19. These comorbidities include being aged ≥ 65 years; having cardiovascular disease, chronic lung disease, sickle cell disease, diabetes, cancer, obesity, or chronic kidney disease; being pregnant; being a cigarette smoker; being a

transplant recipient; and receiving immunosuppressive therapy. Healthcare providers should monitor such patients closely until clinical recovery is achieved (Document et al., 2020b). At present clinical management includes infection prevention and control (IPC) measures and supportive care. Several medicines, which were tried in previous outbreaks of coronavirus infections, as well as in the current COVID-19 outbreak, together with some investigational drugs, are presently being studied at different research and treatment centers all over the world for use as preventive and/or treatment options. In the absence of proven medicines for the prevention and treatment of persons with COVID-19, keeping suspected cases in quarantine while awaiting test results, isolation of confirmed cases, and tracing of contacts of confirmed cases for early detection of the disease are therefore paramount in preventing the spread of the disease (Ministry of Health Provisional Standard Treatment Guidelines for Novel Coronavirus Infection COVID - 19 Guidelines for Ghana).

When someone who has COVID-19 coughs or exhales they release droplets of infected fluid. Most of these droplets fall on nearby surfaces and objects - such as desks, tables, or telephones. People could catch COVID-19 by touching contaminated surfaces or objects – and then touching their eyes, nose, or mouth. If they are standing within one meter of a person with COVID-19 they can catch it by breathing in droplets coughed out or exhaled by them. In other words, COVID-19 spreads in a similar way to the flu. Most persons infected with COVID-19 experience mild symptoms and recover. However, some go on to experience illnesses that are more serious and may require hospital care. The risk of serious illness rises with age: people over 40 seem to be more vulnerable than those under 40. People with weakened immune systems and people with conditions such as diabetes, heart, and lung disease are also more vulnerable to serious illness. Simple ways to prevent the spread of COVID-19 in your workplace are. Make sure your workplaces are clean and hygienic.

Surfaces (e.g. desks and tables) and objects (e.g. telephones, keyboards) need to be wiped with disinfectant regularly.

- Contamination on surfaces touched by staff and patients\clients is one of the main ways that COVID-19 spreads.

- Promote regular and thorough hand washing by employees, contractors, and customers.
- Put sanitizing hand rub dispensers in prominent places around the workplace. Make sure these dispensers are regularly refilled.
- Display posters promoting hand washing.
- Combine this with other communication measures such as offering guidance from occupational health and safety officers, briefings at meetings, and information on the intranet to promote hand washing.
- Make sure that staff, patients\clients, and hawkers have access to places where they can wash their hands with soap and water.
- Promote good respiratory hygiene in the workplace. Display posters promoting respiratory hygiene. Combine this with other communication measures such as offering guidance from occupational health and safety officers, briefing at meetings, and information on the intranet, etc.
- Ensure that facemasks and/or paper tissues are available at your workplaces, for those who develop a runny nose or cough at work, along with closed bins for hygienically disposing of them.
- Why? Because good respiratory hygiene prevents the spread of COVID-19 • Advise staff and patients\clients to consult national travel advice before going on business trips.
- Brief your staff and patients\clients that if COVID-19 starts spreading in your community anyone with even a mild cough or low-grade fever (37.3 C or more) needs to stay at home. They should also stay home (or work from home) if they have had to take simple.
- Keep communicating and promoting the message that people need to stay

- at home even if they have just mild symptoms of COVID-19.
- Display posters with this message in your workplaces. Combine this with other communication channels commonly used in your organization or business.
 - Your occupational health services, local public health authority, or other partners may have developed campaign materials to promote this message.
 - Make clear to employees that they will be able to count this time off as sick leave (WHO).

Once the suspected case has been identified, one of the public health measures is tracking down people who may have been exposed to the virus through a process called contact tracing. Health services use contact tracing to find people who may have been exposed to infectious people. There are two types of contacts, close contacts, and casual contacts. The measure to be taken for those two types of contacts are different. Contact tracing and listing should be done by the rapid response team (RRT). Once the contacts of suspected or confirmed cases are identified and listed, they will be linked to a follow-up team and monitored for 14 days from the last date of contact by active or passive monitoring depending on the type of contact. (National Comprehensive covid19 management Handbook Ethiopia First edition April 2020).

With the recognition of the government's recommendations to limit the spread of COVID-19, it is critical to assess public responses to these preventive measures. At the time of our study, compliance with these preventive measures, especially in urban spaces where intense human interaction takes place, had not been systematically evaluated. We, therefore, assessed ecological readiness and compliance with hand washing, and social and physical distancing recommendations in selected public transportation stations in the GAR. Such a study is urgently needed to provide evidence to guide policy and behavior change communication aimed at reducing the spread of COVID-19 in Ghana and similar settings (Affran et al., 2020). The epidemic has had a significant impact on the physical and mental well-being of many people. Despite the government's efforts to keep COVID-19 under control (Sari et al., 2022).

People affected by humanitarian crises and those living in low-capacity settings are differently impacted by the COVID-19 outbreak. In these settings, critical measures for COVID-19 prevention and control that have been a feature of the response in higher resource settings, such as physical distancing, movement restrictions, home confinement, hand washing with water and soap, closure of schools and workplaces may be more difficult to implement and some of them potentially harmful to the survival of many community members. In addition, capacities for testing, isolating, and treating those who develop the disease, tracing, and quarantining contacts may be severely lacking locally owing to weaker health systems (ICRC, 2020).

6. Facility Associated Factors

The coronavirus disease 2019 (covid-19) has spread across the world. As of 4 July 2021, more than 183 million confirmed cases of covid-19 have been recorded worldwide, and more than 3.97 million deaths have been reported by the World Health Organization (Crook et al., 2021). Practical and environmental issues in the settings in which they worked also impacted healthcare workers. Whilst, for the most part, healthcare workers' fears were allayed by adequate PPE, it was also noted in several papers how the PPE caused discomfort and impacted communication (Von Strauss et al., 2017). Healthcare workers commonly reported elevated workloads, which impacted their psychosocial well-being. They cited increased hours and weekend shifts, additional time taken to manage PPE, and increased paperwork as frequent sources of stress (Bergeron et al., 2006). This was compounded by staff shortages (due to inadequate staffing or staff absences because of ill health or caring responsibilities) resulting in requirements for staff to work overtime. This led to the workers feeling fatigued and risking mistakes (Kisely et al., 2020).

Provide training not only on the clinical skills required to deal with COVID-19 but also on the potentially traumatic situations that staff might be exposed to including honest communication of the facts, developing skills to cope with these, and awareness of potential mental health consequences. Evidence of the benefits of these interventions being delivered pre-trauma exposure appear promising, so are likely to be particularly important for new staff being mobilized to help with the response, such as final year medical students and student nurses, and those that are being

redeployed from other locations or specialties (Billings et al., 2020).

In a study conducted to assess the knowledge and attitude among health workers in Libya. Based on their results, 80% considered using facemasks, 60.6% regarded COVID-19 to be a serious disease, and 63.2% that social distancing is a protective measure against COVID-19 (Elhadi et al., 2021). Healthcare workers play a critical role in fighting the COVID-19 pandemic and are at greater risk of COVID-19 virus infection in the line of duty (Eyram et al., 2021). With the spread of the coronavirus disease 2019 (COVID-19) pandemic, healthcare workers (HCWs) are at a greater risk of severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) infection due to the nature of their work (Min & Moon, 2021). Reports have said that until 5th June 2020, at least 90,000 healthcare workers were infected by COVID-19 and more than 260 nurses have lost their lives to the pandemic (Kishk et al., 2021).

The best prevention for COVID-19 is avoiding exposure to the virus. Healthcare professionals (HCPs) are in front of this pandemic and always work in a high-risk environment. Preventing intra-hospital transmission of contagious diseases is, therefore, a priority. Because of direct contact with patients, health workers play critical roles in the prevention of the COVID-19 outbreak. A combination of standards, airborne and droplet precautions should practice for all COVID-19 cases. They must use personal protective equipment (PPE) such as a glove, gown or apron, and surgical mask (Id et al., 2021). Although there is limited evidence on the type of personal protective equipment (PPE) that offers the best protection, the appropriate use of PPE can significantly reduce the infection risk associated with caring for patients with COVID-19 (Min & Moon, 2021). HWs are the highest risk groups for COVID-19 due to the nature of their occupation which exposed them to infectious people with COVID-19 every day. Several HWs have been infected by COVID-19 and lost their lives globally due to job-related COVID-19. (Asemahagn, 2020). With healthcare systems under pressure to limit the spread of the novel coronavirus, a big part of this responsibility has been shouldered by healthcare workers (HCWs) (Birhanu et al., 2021). Many of these infections are likely due to occupational hazards; workers becoming infected while caring for patients suggests the shortage or inappropriate use of PPE may be at the root of part

of these infections (Savoia et al., 2020). In the context of the pandemic, HCWs play a critical role in providing care for patients with COVID-19. Frontline HCWs such as nurses and physicians in the intensive care unit or isolation wards should ensure the appropriate use of PPE to protect themselves and prevent nosocomial spread. Simultaneously, there are hurdles in using PPE optimally, including higher patient volumes, unavailability of equipment, increased anxiety and fear, a dearth of information, and ambiguity in recommendations.

However, few studies have examined the status of PPE usage and related factors among HCWs during the COVID-19 pandemic (Min & Moon, 2021). The use of PPE has been identified as one of the biggest physical and psychological challenges experienced by physicians while responding to COVID-19. For example, physical burdens related to PPE include repeated donning and doffing of equipment and extended hours wearing uncomfortable masks and respirators, while psychological burdens include challenges communicating with peers and patients when wearing PPE and operating under changed practice standards. Because of PPE shortages, healthcare workers, who may have been trained on how to don and doff PPE to maximize protection from infection, have had to make ad hoc adjustments on what piece of equipment to use and when, which are not reflected in any training they have received. The additional burdens created by a shortage whereby processes for using PPE are continuously changing, have not been explored (Savoia et al., 2020). To protect themselves, nurses need to wear personal protective equipment (PPE) including goggles, N95 masks, and protective suits while at work. However, using PPE over long periods can be exhausting. For example, when wearing an N95 mask, nurses need to speak loudly to ensure that their patients can hear them. (Zhan et al., 2020). A meta-analysis on facemask use, eye protection, and viral infections found that facemasks were associated with an 82% lower risk, and eye protection was associated with a 75% lower risk of SARS, Middle East respiratory syndrome, and COVID-19 collectively. However, the meta-analysis included only three studies of COVID-19 and facemasks, two of which were small with 10 events or fewer, and no studies were included for COVID-19 and eye protection (Kim et al., 2021). In health care facilities, screening and triaging everyone entering a

healthcare facility including HCWs for signs and symptoms of COVID-19 is mandatory (Ghassan et al., 2021). The current global stockpile of PPE is insufficient, particularly for medical masks and respirators; the supply of gowns and goggles is soon expected to be insufficient also. Surging global demand driven not only by the number of COVID-19 cases but also by misinformation, panic buying, and stockpiling will result in further shortages of PPE globally. The capacity to expand PPE production is limited, and the current demand for respirators and masks cannot be met, especially if widespread inappropriate use of PPE continues (Ppe, 2020).

Healthcare workers (HCWs) are at the forefront of COVID-19 management. Unfortunately, due to their increased exposure to highly contagious patients, along with the relative novelty of the virus and the unpreparedness of the healthcare system to deal with the sudden influx of cases, HCWs represent a vulnerable target for infection. According to a previous report by the World Health Organization (WHO), 20% of those affected during the 2002 SARS outbreak were HCWs.⁶ The impact of this on the healthcare system is doubly concerning, given that health facilities are already overburdened by high numbers of patients, with infection among HCWs further aggravating the existing shortage of staff working to curb the spread of disease (Ghassan et al., 2021). Participants repeatedly pointed out that PPE supplied by their hospitals was either inadequate or of low-quality. Though the government demanded on the mass media that every hospital has been provided with the required numbers of PPEs, the fact on the ground was different. Especially, study participants in private medical facilities need to buy their PPEs as they were not sure of the availability in the health facilities (Razu et al., 2021). PPE is a critical part of infection prevention and control. However, PPE should be considered the last line of defense within a broader 'hierarchy of controls' framework, which includes the minimization of risk through the implementation of administrative and engineering controls and other interventions in combination with appropriate PPE (Panel, 2021).

Thus, facing multiple measures about COVID-19, the demand for health care is likely to be reduced. This could have negative consequences for the health status of the population. These reductions can result from a range of supply and demand side factors. With this pandemic, most healthcare staff are being reassigned to

respond to COVID-19 emergencies, leaving the healthcare provider unable to meet the population's request for care (Tossou, 2021). In addition, CDC recommends the implementation of telehealth and nurse-directed triage protocols to determine if an appointment is necessary or if the patient can be managed from home (Ghassan et al., 2021). If HWs have access to information sources, they will upgrade their knowledge and apply preventive devices to prevent COVID-19 and give appropriate care to patients, families, and the community (Asemahagn, 2020). Because of this pandemic, health workers are being faced with heavy workload pressure, besides the increased total health expenditures. The immense burden of COVID-19 disease could cause caregiver burnout. Notably, the major sources of psychological distress among healthcare workers are as follows: increased work hours, lack of sleep quality, fatigue, and the risk of infecting with this virus and then putting their family members at risk of a life-threatening condition (Shoja et al., 2020). However, some studies have shown that extreme job stress caused by excessive job-related demands (e.g., increasing workload, inadequate work environment) is more likely to lead to burnout. Simultaneously, working excessively and compulsively may affect well-being at work and increase the risk of burnout (Zhan et al., 2020). The social stigma was another challenge for healthcare professionals during the COVID-19 pandemic. The neighbors perceived them as a nuisance and usually avoided communication for fear of infection. In some cases, property owners raised monthly house rents of the medical workers and evicted them from their properties if they tested COVID-positive. Sometimes, their maintenance of social distance became rather cruel, and this disturbed the healthcare professionals (Razu et al., 2021). Healthcare organizations are evolving to adapt to shifts in demography, epidemiology and societal mindsets that are emerging in the backdrop of several contexts, challenges and uncertainties. The divergent infrastructure needed by the healthcare personnel including physicians, clinicians, nurses, paramedics, practitioners, administrative staff, managers and leaders to respond to various ongoing and contemporary issues remain unclear or not effectively understood (Sengupta et al., 2021). All participants were aware that there was no extra incentive for them despite working extra hours. The government, such as providing treatment costs in case of infection and providing an isolation room to ensure safe inhibition, promised some incentives.

However, none was implemented in real life (Razu et al., 2021).

7. The Impact of Stigmatization among Staffs survivors from COVID-19

The emergence of the 2019 novel coronavirus disease (COVID-19) raised global health concerns throughout the world. It has become a major challenge for healthcare personnel and researchers throughout the world to efficiently track and prevent the transmission of this virus (Kumar & Beborra, 2022). Public health research has shown those patients who confirmed positive for coronavirus faced harmful stigma, in some cases, had led to eviction, abandonment, and other consequences due to COVID-19 (Dwinantoaji & Dw, 2020). Many forms of stigma and discrimination have surfaced since the identification of COVID-19. Xenophobia has been directed at people thought to be responsible for “bringing” COVID-19 into countries. People who have recovered from COVID-19, essential workers such as healthcare staff, and populations facing pre-existing stigma and discrimination (e.g., people living with HIV, people from gender and sexual minorities, sex workers, and migrants) have been subject to verbal and physical abuse (UNAIDS Joint United Nations Programme on HIV/AIDS 20 Avenue Appia 1211 Geneva 27 Switzerland). The global spontaneous transmission of the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) also known as coronavirus disease 2019 (COVID-19) is having an intolerable burden on all aspects of human lives and livelihood, health systems functioning, and global health security (Atinga et al., 2021). The COVID-19 pandemic has social, psychological, and mental health consequences and manifestations that require adequate attention from governments and policymakers. Uncertainties and the uncontrolled spread of the virus have led to anxiety, fear, stigma, and discrimination (Anant & Rajasekharan, 2020). The coronavirus disease (COVID-19) pandemic has impacted the economy, livelihood, and physical and mental well-being of people worldwide (Wang et al., 2021). Moreover, not only active cases of COVID-19 and healthcare providers but also those who have recovered from the disease are facing discrimination. Many of the recovered patients have been denied to enter into the community with the perception that they may be re-infected and transmit the virus to others. This attitude and stigma shown by the community have been creating a non-supportive environment to control this

crisis and are adding a burden on the healthcare providers and the administrators. The non-supportive environment, in turn, has created more difficulty in tracing contact with COVID-19-infected people. Over and above that, to avoid discrimination due to the stigma attached to the disease, people may be driven towards behaviors including hiding their illness and not seeking healthcare, which could ultimately lead them to more severe health problems.

These behaviors evolved against the stigma, further, may lead to increased cases and deaths due to COVID-19. Even after defeating the virus, they have not been able to free themselves from being shunned by society. They are reported being treated as untouchables, receiving humiliating taunts, and fingers pointed against them and their family; their lane of residence has been named (corona street), and the associated burden is strong enough that it has even compelled them to sell their own house (Bhanot et al., 2021). Poor mental health and wellbeing and high rates of suicide ideation and suicide have also been noted, and the economic impact of COVID-19 is likely to get worse (Wild et al., 2021). Excessive fear, and unequal treatment, of recovered COVID-19 patients occur despite the absence of any evidence that recovered COVID-19 patients infect other people. Discrimination against recovered COVID-19 patients has the potential of morphing into a long-run major social problem, overshadowing previous infectious diseases emergencies, such as hepatitis B virus (HBV), severe acute respiratory syndrome (SARS), and human immunodeficiency virus (HIV) (Liu et al., 2022). Stigmatization could potentially contribute to more severe health problems, ongoing transmission, and difficulties controlling infectious diseases during a pandemic covering human life, livelihoods, and wellbeing (Anant & Rajasekharan, 2020). COVID-19 survivors and their families are reported to face discrimination, rejection, stigmatization, and isolation, all of which are driven by fear of being infected and fear-induced misrepresentations and misinformation about the pandemic within cultural, organizational, religious, and social circles (Atinga et al., 2021).

Researchers have already sounded the alarm on how the COVID-19 pandemic may affect the mental health of the general population, and more specifically patients with mental disorders (Issue, 2020). The present pandemic highlights the need to disseminate the

right and timely information to build trust and generate faith in control measures and health systems to promote a positive social and psychological environment. Stigma will not help modern societies to survive such pandemics as it may hamper easy-to-follow preventive strategies not only during the pandemic but during the post-pandemic period as well (Anant & Rajasekharan, 2020). Stigma could affect the emotion, mental, and physical well-being of the inflicted groups. Stigmatized people attributed to infectious diseases may experience rejections from partners, families, and friends, dismissal from work, and declined quality of health services received, causing alienation, depression, or anxiety (Chew et al., 2021). The scientific evidence and the strong message from service users and their advocates indicate that discrimination blights the lives of many people with mental illness, making marriage, childcare, work, and normal social life much more difficult (Thornicroft et al., 2008). It is important to note that stigma reduces health-, help-, and treatment-seeking behavior and needs to be mitigated, apart from the focus on COVID-19 treatment and prevention (Bhanot et al., 2021).

8. Control of Stigmatization among Staffs Survivors of COVID-19

The COVID-19 pandemic has been instrumental in creating a dramatic shift from people's need to live in mutual association toward a desire to stigmatize distinctive others (Bhanot et al., 2021). COVID-19 presents an opportunity to bring together diverse communities and establish meaningful partnerships between culturally and linguistically diverse (CALD) communities and health officials (Wild et al., 2021). practitioners need in the future to pay greater attention to what the public such as the community and family members say about their experiences of discrimination and stigmatization for example concerning work or housing (Thornicroft et al., 2008). Moreover, societal factors must be taken into account when developing a public health communication strategy, which, to be genuinely effective in engaging maximum public support and participation, needs to be sensitive to the concerns and values of diverse publics and work with different modes of information sharing. The recent proliferation of information available via online media provides an additional layer of complexity. Television and printed news media, which in the past have been an essential conduit for circulating public health information, must now compete with a vast array of easily accessible social media and online news and

opinion sources. In particular, social media is highly engaging and encourages users to share stories, images, and opinions (Hyland-wood et al., 2021). Destigmatization of infectious diseases is hence important to reduce the rate of non-disclosure and transmission and reduce discrimination with improvement in disease awareness among the general population (Chew et al., 2021).

The evidence clearly shows that stigma and fear around communicable diseases hamper the response. What works is building trust in reliable health services and advice, showing empathy with those affected, understanding the disease itself, and adopting effective, practical measures so people can help keep themselves and their loved ones safe. How we communicate about COVID-19 is critical in supporting people to take effective action to help combat the disease and to avoid fueling fear and stigma. An environment needs to be created in which the disease and its impact can be discussed and addressed openly, honestly, and effectively (Is & Stigma, 2020). Our recommendations represent the first consolidated set of guidance on principles for reducing stigma and discrimination concerning COVID-19, responding to recent calls for scientific advice and evidence-based recommendations for stigma-reduction strategies with COVID-19. Given the negative impact of stigma and discrimination on people's physical and mental health and wellbeing, social equity, livelihoods, and efforts to control the disease outbreak (Gronholm, 2021). Embarked on educating and sensitizing key stakeholders and victims of COVID-19 to help reduce stigma in the community. Educational messages on awareness were drafted with the support of the Ghana Field Epidemiology and Laboratory Training Programme (G.F.E.L.T.P.) and played throughout the community utilizing the van. This helped in demystifying stigma issues. Some of the key messages include "we are all at risk, don't be judgmental", the need to mind the kind of language used on cases and contacts, and preventive measures for COVID-19. During these sessions, people should be allowed to ask questions that bothered them, and they will be addressed to reduce misinformation and ignorance (Bandoh et al., 2021). When talking about coronavirus disease, certain words (i.e suspect case, isolation...) and language may have a negative meaning for people and fuel stigmatizing attitudes. They can perpetuate existing negative stereotypes or assumptions, strengthen false associations between the disease and other factors, create widespread fear, or

dehumanize those who have the disease.

This can drive people away from being screened, tested and quarantined. We recommend a ‘people- first’ language that respects and empowers people in all communication channels, including the media. Words used in media are especially important because these will shape the popular language and communication on the new coronavirus (COVID-19). Negative reporting has the potential to influence how people suspected to have the new coronavirus (COVID-19), patients and their families, and affected communities are perceived and treated (Is & Stigma, 2020). According to (Shrestha et al., 2021), a study conducted on Knowledge and attitude on prevention of COVID-19 among community health workers in Nepal—a cross-sectional study, revealed that the odds of knowledge level was 2 times higher (AOR = 1.913 at 95% CI: 1.266– 2.891) compared to the female participants. Knowledge level was significantly associated with the designation of the respondents as nursing staff had 2 folds more knowledge (AOR = 2.243, 95% CI = 1.006–5.00) compared to those of the HA (Ref-HA). Similarly, the variables of education level and monthly income of the participants were also found to have a statistically significant relationship with the knowledge level (Shrestha et al., 2021).

A study conducted in Nepal revealed that Stigma faced by health workers was significantly associated with higher odds of experiencing symptoms of anxiety (AOR: 2.47; 95% CI: 1.62–3.76), depression (AOR: 2.05; 95% CI: 1.34–3.11) (Khanal et al., 2020). Regarding work experience, those who had less than 5 years of work experience (AOR = 0.50; 95% CI: 0.29–0.85) had lower odds of having symptoms of insomnia compared with those with experience of more than 5 years. Gender, education, living with elderly people, a family member with chronic disease, working overtime and awareness about government incentives were however not statistically significant with the presence of anxiety symptoms. Similarly, ethnicity, education, and living with children were not statistically significant in the presence of depression symptoms. Likewise, age, profession, education, working overtime, and awareness about government incentive was not statistically significant (Khanal et al., 2020). A relatively high level of stigma associated with COVID-19 was observed among HCWs in Indonesia in the early phase of the pandemic. HCWs who had not

participated in any COVID-19-related training courses were likely to have no stigma associated with the disease compared to those who had (OR: 0.19; 95% CI: 0.007 - 0.54) (Yufika et al., 2020).

9. Conclusion

The COVID-19 pandemic has presented numerous challenges for healthcare workers who are at the forefront of managing and controlling the disease. The survival of staff during this period is associated with several behavioral factors that can help to minimize the risk of infection and promote overall well-being. Key factors such as. Compliance with infection prevention and control measures: Healthcare workers should comply with infection prevention and control measures to minimize the risk of transmission. This includes wearing appropriate personal protective equipment (PPE) such as masks, gloves, and gowns, hand hygiene, and social distancing. Effective communication: Clear and concise communication is essential in promoting staff safety during the pandemic. Healthcare workers should be informed of any changes in the COVID-19 situation, updates on policies and procedures, and new treatment strategies. Stress management: The pandemic has had a significant impact on the mental health and well-being of healthcare workers. Staff should be encouraged to take care of their mental and emotional health, including engaging in activities that promote relaxation and stress relief, seeking support from peers or mental health professionals when needed, and taking breaks to rest and recharge. Adequate training and resources: Healthcare workers need adequate training and resources to manage COVID-19 patients effectively. This includes training on the use of PPE, infection prevention and control measures, and treatment strategies. Supportive work environment: A supportive work environment can help to reduce stress and promote staff well-being. Employers should provide resources such as counseling services, flexible schedules, and adequate staffing to ensure that staff can manage their workload without compromising their health and safety. Overall, the survival of healthcare workers during the COVID-19 pandemic is associated with a combination of individual and organizational factors that promote safety, well-being, and effective management of the disease.

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