

The High Fatality Rate of Health Care Staff in Africa as a Result of Covid-19: An Explanatory Study

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Abstract

Background: Two years ago the Coronavirus disease 2019 (Covid-19) was identified in Wuhan, China for the first time in December 2019 and since then it has unfolded throughout the globe inflicting the worldwide collapse and closure of international borders, health care facilities as well as disrupt all social activities. One in every of the area's that has been adversely affected is the health care system. The forceful results of Covid-19 on health care systems is overshadowed by its effect on economic activities, that has been put on attentiveness of many news platforms and media retailers. This has ensued very little or no applied statistical data on the various health care staff that have been and still being lost t Covid-19 pandemic.

Index terms— Covid-19, WHO, Frontline worker, Healthcare staff (HCS), Healthcare workers (HCW), Reproduction number (R0), Vaccine hesitancy

1 Introduction

r. Tedros Adhanom WHO Director-General revealed in a conference that a lot of health care workers have lost their lives as a result of Covid-19 pandemic [1]. The natural event hit the globe, exhausting and affecting each nation across the world in aplethro of ways .Different sectors faced challenges due to this such as industry shut down or halting, closure of international borders, Sports & recreation facilites, hyperlocal marketplaces, travel & business enterprise, dramatic thinning out of human, industrial production and transportation of goods and services [2]. Although these areas have all faced great challenges, the most debilitating is faced by the healthcare professionals who are the frontrunners in the battle against this pandemic, who are rearly tested as a result of luck of testing kits in many hospitals [3]. Over time, the burden on the health care system particularly in the continent has been neglected and unprecedented. The pandemic caused by the novel Severe Acute Respiratory Syndrome (SARS-CoV-2) has caused loss of lives, accpanied with a mess of uncomparable obstacles, like the shortage of efficacious drug mixtures for its treatment as well as increased demand in health care support items like beds, medication, masks, personal protecting equipment and sanitisers. Even with insufficient supply of important medical materials, the bulk of healthy care workers have managed to continue daily operations at a heavy cost. Frontline workers who are necessary in the fight against Covid-19 have been neglected, resulting in several of their affections forgotten and unresolved.

According to Fauci AS, the capability in transmission of the severe acute respiratory syndrome (SARS) is reliant on reproduction number(R0) [4], [5], which for Covid-19 stands at 2-2.5 [6], [7]. Moreover, the reproduction number (R0) merely entails each contagious individual extent to infect a minimum of two/three individuals on contact [8] which is very high when one considers the factors highlighted above. Currently, health care workers are in an exceedingly state of distress, as little is done to shield them, despite being in contact with infectious Covid-19 carriers. In addition, they isn't any adequate statistics to accurately track and trace the impact of Covid-19 on the health care workers in the continent of Africa. Even though statistics on the fatal impact on health care personal is reported by numerous organisation like Bbc, Aljazeera and local media retailers, it isn't thought of as official information because it isn't statistically standardized and collected centrally.

2 II. Factors Attributed to the Increased Infection of Health Care

The World Health Organization (WHO) survey revealed that about 10,000 health workers across 40 countries are infected with Covid-19 and preliminary shows that in Africa healthcare infection make up more 10% of the generally population [WHO Africa,2020, over 10000 health workers Africa infected with covid-19, BRAZZAVILLE, viewed 30 July 2021, <https://www.afro.who.int/news/over-10-000-health-workers-africa-infected-covid-19>], furthermore Erdem et al reveals and confirms that about 10,000 medical personal were infected by coronavirus reported by WHO in an independent research [9]. Additionally rapid infection of physicians and health workers has been mostly attributed to the subsequent six major factors: Impassable roads and penniless standards of living lead to inaccessibility of essential health materials and facilities [10], Inadequate PPE equipment for health personal, Lack of essential items like filtering face piece respirators (face masks), Hand sanitizer, Medical gloves, Inadequate testing kits [3] and a small number of frontline workers who attend to covid patients [11]. According to WHO, Covid-19 cases amongst health care professionals have escalated by 203% resulting in an abrupt demand for more frontline workers [12], [13].

Further research has shown an increase in mental health related complications such as stress and anxiety has been known collectively of the foremost distinguished mental state suffered by health care professionals. This emotional and mental strain amongst health care workers has resulted in them being inefficient to attend to Covid-19 related critically ill patients because of the perils of exposure and threat to their own health [2], [13], [14]. Shanafelt, et al attributed this to seven important provenances in health care workers that have abetted mental health complications these factors are support for family needs as work hours and demands increase eg (food, hydration, lodging and transportation), uncertainty that the organization will cover the medical bills in an event they develop an infection, being exposed to COVID-19 at work and taking the infection home to their family, not having speedy access to testing if they develop COVID-19 symptoms, no risk allowance, lack of non-invasive ventilation, limited access to high-flow nasal cannula and bag-mask ventilation [14], [15], [16]. This has resulted in high cases of involuntary retirement of healthcare workers as a result fear of infection [2].

3 III. The Standing of African Health Care

System: Implications within the Covid-19 ERA According to a report by WHO on 3 June 2021, the regional director for Africa, Dr. Matshidiso Moeti warned that "Many African hospitals and clinics are still far from ready to cope with a huge rise in critically-ill patients," [WHO, MEDICALXPRESS, 2021, Africa not ready for imminent third coronavirus wave: WHO, viewed 10 July 2021, <https://medicalxpress.com/news/2021-06africa-ready-imminent-coronavirus.html>]. The statement confirms that across Africa, the healthcare system has been primary the most unrevamped sector of the many countries, despite numerous countries experiencing severe epidemics like Ebola, Measles, Meningitis and cholera [17]. Despite this, adaptation and state of vigilance for future epidemics and pandemics are terribly slow and unresponsive. Thus, COVID-19 exposed an enormous deficit in health services like preventative care, prenatal care, physical and occupational therapy, nutritional support, preventative care, laboratory and diagnostic care and most significantly pharmaceutical care, Furthermore Paintsil E et al accredited the drawbacks of Africa's healthcare system due to the lack of unyielding implementation of the International Health Regulations (IHR) tenets of 2005 [18]. The failure of full implementation of the IHR has contributed to the breaches in paramount policies such as finance, points of entry, human resource capability, preparedness, risk communication, surveillance, potential hazards, laboratory and legislation which are all essential in the running of any health care institutions [18] in addition strict observations to these regulation would have cushioned the Covid-19 impact on numerous health care institutions across Africa. Even though many healthcare systems are trying so hard to down play the Covid-19 effects, its catastrophic impact is felt on several areas of the hospital such as inadequate infrastructure eg bed space, shortage of intensive care units, shortage of ventilators, shortage of oxygen, salary cuts, strikes [19] and limited Covid-19 testing kits [3].

In an attempt to stabilize the already vulnerably healthcare system, many African countries have taken different approaches to moderate the effect by increasing work force, increasing inpatient patient capacity, intensifying of testing of citizens, introduction of universal health coverage and providing of vaccines for all health care workers [20]. Even with the introduction of vaccine, has been met by a plethora healthcare workers with a lot confrontation and debates. Frontline workers have argued that mandatory vaccination for all health care workers is not the best approach to curb the spread of COVID-19, with the phrase "no jab, no job" this has led to even a much larger outcry and legal action taken by health care workers against their management [21].

Vaccine hesitancy is still a relevant issue by numerous nurses, doctors and public unions that have birthed the argument that these novel vaccines could themselves cause a possible risk or hazard hence leading to an unwillingness of health cares to take the vaccine even in light of the current situation [22], [21], [23,24], furthermore Woolf K et al discovered that hesitancy to the vaccine was based on, safety concerns due to the speed of vaccine development, lack of ethnic diversity in vaccine studies, confusing and conflicting information [25], in addition Woolf K et al further explained that other self-determining cause of the hesitancy in vaccination was due to higher score on COVID-19 conspiracy beliefs scale, lower trust in employer, lack of influenza vaccine uptake in the previous season, previous COVID-19, and pregnancy [25]. Yet scientists have assured the overall public that every vaccine is safe by using vaccine Adverse Event Reportage System (VAERS) commonly known as

105 Vsafe, which is a monitoring system established by Center for Disease Control and Prevention specifically for the
106 COVID-19 vaccination program [22], [26].
107 IV.

108 4 Conclusion

109 Major changes ought to be created regarding the health care system in the continent. These changes might be the
110 difference between life and death for healthcare works. Itemised below are submissions that might health diminish
111 the death of health and strengthen health care system from current and future epidemics. 1. WHO should setup
112 have health correspondent offices in every country in Africa. This office will be responsible for central collection
113 data of covid related deaths of health workers across the country. in addition there is a requirement for developing
114 cheap and accommodative tracing apps, which will be distributed in every hospital to facilliate easy systematic
115 collection of information and data. This will help WHO keep track of all the health worker associated death that
116 might occure. 2. African countries ought to establish a roboost industrial facility that will be incharge of carry
117 out epidemic relatated research.

118 3. In addition Countries have to be compelled to be a lot of ready for epidemics and pandemics by updating
119 the follow imporve safety conditons, updrade of infrasarrtucture and equipment, in addition employing of more
120 workers will help reduce strain in hospitals 4. WHO ought to introduce obligatory bimonthly tests for all frontline
121 staff. It is solely through strategic management that the loss of valuable health care personal are going to be
122 avoided. Improving health care system is the only way you are assured of protecting the health care worker from
123 sudden infection and in addition imporving of data collection in every hospital will help further improve the call
to attention the death of health workers.

[Note: being lost t Covid-19 pandermic. It can't go without mention that the health care system in African countries has done a disservice to its employees by not accurately keeping track of the various doctors, nurses, emergency medical technicians and Covid-19 initial responders (frontline workers) that have died as a result of infection due to many ineluctable factors like Inadequate PPE (Personal protecting instrumentality) equipment for healthy personal, Lack of essential instrumentality like filtering face piece respirators, face masks, hand sanitiser, gloves, as well as failure to stick to Covid-19 regulations.Methods: The review applied literature resesrch of COVID-19 reports, WHO, Africa CDC, Independent newes sources and articles from Google scholar. Conclusion: Very little to no data from numerous health care managers and ministries has been provided regarding the happenings and consequences of Covid-19 on health care personal yet Covid-19 has to a degree exposed the failing and challenges currently exisiting within the many health care system in Africa, hence it's essential that Center for Disease Control and Prevention(CDC) and WHO ought to step in and regulate the central collection of significant data from health care ministries across Africa.]

Figure 1:

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