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OCCUPATIONAL SAFETY AND WELLBEING OF SOCIAL WORKERS IN THE ERA OF COVID-19 PANDEMIC

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ABSTRACT

In the midst of the COVID-19 pandemic, a safe working environment is essential for health care workers such as social workers and even the clients they serve. The study examined occupational safety and wellbeing among social workers in Lagos and Ibadan, Nigeria. A descriptive cross-sectional survey was used for the study while a self-constructed validated questionnaire was sent on-line to social workers working in isolation centres and hospital concerned with the treatment of COVID19 patients. Four research questions were formulated for the study while descriptive statistics of percentages frequency tables, mean and standard deviation scores and inferential statistic of multiple regressions was used to analyse the data. Result revealed that provision of protective personal equipment such as face mask, hand sanitizer ($\beta = -0.672, t = -5.606, p < 0.05$) and safe work environment ($\beta = 0.657, t = 5.480, p < 0.05$) significantly predicted the wellbeing of social workers. Based on these findings, the study recommended that there is need for the implementation of safe workplace practices to limit exposure social workers to COVID-19. Based on these findings, healthcare centres should ensure adequate provision and maintenance of protective safety equipment and ensure that standards are not compromised; health workers should be properly trained on the use of protective equipment.

KEY TERMS: occupational safety, wellbeing, social workers, COVID-19, pandemic, Nigeria

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INTRODUCTION

In December 2019, cases of pneumonia with unknown causes were detected in Wuhan, China. By 11th of February, 2020, COVID-19 an emerging respiratory disease that is caused by a novel coronavirus called coronavirus SARS-CoV-2 had been identified as the virus causing these symptoms, and exactly a month after detection of the virus, World Health Organization (WHO) officially announced COVID-19 as a pandemic and a public health concern as it spread rapidly across the world with direct impact on health and well-being. (WHO, 2019). The disease is highly infectious, and its main clinical symptoms include fever, dry cough, fatigue, myalgia (pain in a muscle or group of muscles) and dyspnoea (difficulty breathing) (Zhong et al., 2020). The first case of COVID-19 in Africa was confirmed on 14th February 2020 in Egypt (Chersich et al., 2020).

In Sub-Saharan Africa, the first case was reported in Nigeria on the 27th of February 9 (Centre for Disease Control, Nigeria, 2020). By the 13th of May, 2020, every African country had recorded cases of COVID-19 infection, the last being Lesotho (African News, 2020). Most cases confirmed in Africa during the first week were imported from either Asia or Europe. Globally, as at 25th of July, 2020, over 16 million have been infected with the virus with 649,456 death while 9,952,165 recovered. In Africa, 789,226 have confirmed cases, 16,715 death and 447,026 recovered. In Nigeria, 39,977 cases were confirmed, with 16,948 recoveries while 856 deaths were recorded.

As the virus ravages the world, social workers play a vital role in the control of the pandemic as they are part of the front-line workers providing essential services. Even as many countries introduced lock-down measures to control the spread of the virus, social workers still work in close proximity with clients in hospitals and the community. In the midst of the pandemic, a safe working environment is essential for social workers in order to guarantee their wellbeing. Social workers in health care centres caring for COVID-19 patients are potentially exposed to various types of occupational hazards. The study covers social workers in health care centres caring for COVID-19 patients such as in isolation centres, hospitals in the South-western Nigeria. Furthermore, the study examines occupational safety and well-being of Social workers during the pandemic. The study is limited to Social workers in hospitals and isolation centres and their wellbeing while four research questions were formulated to provide address the problem.

BACKGROUND

Generally, healthcare workers operate in an environment that is considered to be hazardous in the course of performing their duty; they are potentially exposed to many occupational hazards, including physical, chemical, biological, ergonomic-related, and psychological hazards (Mossburg et al., 2019). Generally, healthcare workers operate in an environment that is considered to be one of the most hazardous occupational settings (Moore and Kaczmarek, 1990). Due to the nature of their work, they often encounter diverse hazards due to their work-related activities (Manyele et al., 2008). According to Ndejjo et al, (2015) factors associated with experiencing hazards include lack of personal protective equipment, unsafe work environment, and experiencing work related stress. Similarly, WHO (2020) stated that exposure to infections, unsafe work environment and poor working conditions worsen the case as the COVID-19 virus spreads rapidly in many African countries. According to the WHO, preliminary data shows that health workers in Africa make up more than 10% of all infections of the virus. Similarly, the Nigeria Centre for Disease Control reported that as at February 2020, more than 800 health workers have been infected by the virus. Studies such as Lu et al. (2019) and Zhu et al., (2020) also confirmed that the risks of SARS-CoV-2 infection may be higher among professionals such as Medical doctors, social workers etc. who work in close physical proximity to patients.

The National Association of Resident Doctors in Nigeria (NARD) raised concerns about the number of infections and deaths among health workers noting that with the exception of South Africa, more health workers have tested positive for coronavirus in Nigeria than in any other country in the continent. On many occasions, the Nigerian Medical Association threatened to embark on an indefinite strike unless the government provided healthcare workers with more personal protective equipment such a gown, gloves, face mask, and a face shield or goggles and prompt payment of hazard allowance in treating patients infected with COVID-19.

Social workers being an integral part of the health care system are not left out as they encounter a variety of occupational safety challenges in the course of their duty during the pandemic. They are exposed to patients who have not manifest signs of the disease when they go for contact tracing and those in the health facilities for a range of other services. Furthermore, they experience mental stress as a result of separation from families and the pain of losing infected patients and colleagues who acquire virus and died. Providing a safe work environment ensure healthy workers, lower risk of injury and disease which enables them to increase their productivity (Hamar et al., 2015). Therefore, understanding these challenges as it affects the wellbeing of social workers in their effort to take care of COVID-19 patients is needed, to ensure their optimal performance as they

provide complimentary services to other health workers to eradicate the virus. Four research questions guided this study: They are:

- i. What is the level of provision of safety equipment provided for social workers during COVID-19 pandemic in South-West Nigeria?
- ii. What is the level of provision of safe work environment for social workers during COVID-19 pandemic in South-West Nigeria?
- iii. What is the level of wellbeing of social workers during COVID19 pandemic in South-West Nigeria?
- iv. To what extent does occupational safety such as provision of safety equipment and safe work environment contribute to wellbeing of social workers during COVID19 pandemic in South-West Nigeria?

METHODS

The study was correlational in nature and data was obtained through online survey due to the highly contagious nature of the virus and the restrictions in healthcare facilities where patients are being treated. Correlational design was considered appropriate because it enables the researcher to describe the relationships between the key variables of interest in the study.

Sampling Technique and Sample Size

Purposive sampling technique was used to select Social Workers involved in the care of COVID-19 patients while the one hundred (122) respondents made up the sampling size. The study was correlational in nature and data was obtained through the survey method.

Participants

The target population for the study consists of registered social workers working in hospitals designated for the treatment of COVID-19 patients and Isolation Centres. Two cities Ibadan and Lagos were purposively selected.

Instrument

A self-report questionnaire containing standardized instrument was used to collect relevant data. The questionnaire was divided into three sections (A-C). The questionnaire captures personal information about the respondent such as gender. Section A includes five (5) items which measures the provision of personal safety equipment using the work safety scale developed by Hayes (1994) as a guide. Items include provision and maintenance of equipment such as, face mask, hand gloves, goggle/face shield in isolation centres. Section B also includes five (5) items which measures the provision of a safe work environment using the worksafety scale developed by Hayes (1994) as a guide. Items include provision of sanitized work environment while section C contains five (5) items that measures wellbeing. Items were adapted from Adult wellbeing scale developed by Snaith et al., (1978). The questions were designed to reflect social workers wellbeing since they started working with COVID-19 patients. All items were scored on 4-point response format ranging from Strongly Agree (SA=4), Agree (A=3), Disagree (A=2), Strongly Disagree (SA=1). The research instrument was subjected to reliability testing using Cronbach's alpha and a reliability coefficient of 0.85 was obtained.

Research procedure

Due to the restrictions in locations where COVID-19 patients were being treated, on-line questionnaire were sent to social workers through various on-line platforms such the yahoo mail and WhatsApp The researcher stated clearly to the respondents that the questionnaires were strictly for research purpose only. The first item on the questionnaire seek the consent of respondents and were also informed that they are free to opt out of the study if they so wish. They were also assured that the information would be treated confidentially. One hundred and twenty-two (122) social workers answered and returned the questionnaire.

Data analysis results

The data collected from the respondents were analysed using statistical package for social sciences (SPSS) software version 20 and the results were discussed using descriptive statistics of percentages frequency tables, mean and standard deviation scores, chart and inferential statistic of multiple regression.

Gender of the respondents

The gender distribution of the respondents is highlighted in figure 4.1. Sixty-eight (56.0%) of the respondents were male and 54(44.0%) were female respectively. This showed that the majority of the respondents were male

RESULTS

Table 1: Items on provision of safety equipment

S/N	Item	SA (%)	A (%)	D (%)	SD (%)	Mean	Std. Dev.
i	There is adequate provision of personal safety equipment such as, face mask, hand gloves, goggles/face shield in the healthcare centre	37 (30.3)	42 (34.4)	20 (16.4)	23 (18.9)	2.76	1.08
ii	There is provision of non-hazardous cleaning products such as soap, hand sanitizer, disinfectants	5 (4.1)	23 (18.9)	52 (42.6)	42 (34.4)	1.93	0.84
iii	Equipment/tools provided are checked and maintained regularly	33 (27.0)	32 (26.2)	31 (25.4)	26 (21.3)	2.59	1.10
iv	Working environment is designed for the convenience and safety of the personnel	27 (22.1)	27 (22.1)	40 (32.8)	28 (23.0)	2.43	1.08
v	Personnel are properly trained on the use of safety equipment	17 (13.9)	34 (27.9)	44 (36.1)	27 (22.1)	2.34	0.98
	Overall	Mean = 12.05, Std. Dev. = 3.63					

SA= Strongly Agreed, A=Agreed, D= Disagree, SD = Strongly Disagree

The level of provision of safety equipment for social workers during COVID-19 pandemic in South-West Nigeria was defined by five items (1-Strongly agree, 2-Agree, 3- Strongly disagree and 4- Disagree). Descriptive statistics was used to analyse the data collected and the results are presented in Table 1. From the test norm level of provision of safety equipment for social workers during COVID-19 pandemic scale, the total maximum score of 20 is permissible. A score of 1-9 points' shows low level of provision of safe work environment for social workers during COVID-19 and 10–20 points indicates high level of provision of safety equipment for social workers during COVID-19. Since the mean(\pm SD) score of the respondents is 12.05(\pm 3.63) as shown in table 1 which falls within the range of 10–20, it can then be concluded a high level of provision of safety equipment for social workers during covid19 pandemic in South-West Nigeria.

The study also revealed that out of the five items listed to determine the level of provision of safe work environment for social workers during COVID-19 pandemic all the items yielded high mean scores between 1.93 and 2.76. With these results, it could be deduced a high level of provision of safety equipment for social workers during covid19 pandemic. Provision of safety equipment is essential to reduce the spread of COVID-19 virus as studies has shown that the provision and use of personal protective equipment helps to reduce exposure to infection within healthcare facilities (Ghinai et al.; 2020; Marchand-Senecal et al, 2020).

Ndejjo et al., (2015) also established that the use of personal protective equipment was associated with reduced exposure to biological and non-biological hazards. Similarly, Hayden et al., (2009) reported that use of PPEs reduced acquisition of illnesses in hospital settings while Siegel et al., (2007) emphasized use and compliance with personal protective equipment as important in healthcare industry in order to minimize exposure to viral or bacterial infections. Ishola (2017) concluded that the provision and maintenance of workplace equipment was positively correlated of workers' wellbeing. It is therefore important that social workers comply with the use of safety equipment during the COVID-19 pandemic to reduce exposure to the virus.

Table 2: Items on provision safe work environment

S/N	Item	SA (%)	A (%)	D (%)	SD (%)	Mean	Std. Dev.
I	Work environment is regularly kept clean and sanitized	9 (7.4)	32 (26.2)	50 (41.0)	31 (25.4)	2.16	0.89
Ii	Adequate measures to reduce risk of spreading the disease such as physical distancing is put in place	18 (14.8)	26 (21.3)	46 (37.7)	32 (26.2)	2.25	0.01
Iii	Potential indoor pollutants such as the file room are clearly separated with self-closing doors or ventilation to protect employees	46 (37.7)	28 (23.0)	31 (25.4)	17 (13.9)	2.84	1.08
Iv	Risk assessment is carried out regularly when there is a change to the work process in order to consider all risks	38 (31.1)	41 (33.6)	35 (28.7)	8 (6.6)	2.89	0.93

V	Posters that encourage hygiene are placed at contagious places.	24 (19.7)	26 (21.3)	49 (40.2)	23 (18.9)	2.42	1.01
	Overall	Mean = 12.56, Std. Dev. = 3.39					

The level of provision of safe work environment for social workers during covid19 pandemic in South-West Nigeria was defined by five items (1-Strongly agree, 2-Agree, 3- Strongly disagree and 4- Disagree). Descriptive statistics was used to analyse the data collected and the results are presented in table 2. From the test norm level of provision of safe work environment for social workers during COVID-19 scale, the total maximum score of 20 is permissible. A score of 1-9 points' shows low level of provision of safe work environment for social workers during COVID-19 and 10-20 points indicates high level of provision of safe work environment for social workers during COVID-19. Since the mean(\pm SD) score of the respondents is 12.56(\pm 3.39) as shown in table 2 which falls within the range of 10-20, it can then be concluded a high level of provision of safe work environment for social workers during covid19 pandemic in South-West Nigeria

The study also revealed that out of the five items listed to determine the level of provision of safe work environment for social workers during COVID-19 pandemic, all the items yielded high mean scores between 2.16 and 2.89. With these results, it could be deduced a high level of provision of safe work environment for social workers during covid19 pandemic. A safe work environment is an essential part of employee well-being particularly during the period of pandemic. Healthy workers are known to have a lower risk of injury and disease, better quality of life and increased work productivity. As a result, they are in a better position to contribute to their communities (Institute for Health and Productivity, 2015). In the same vein, Gershon et al. (2000) concluded that a safe environment was significantly correlated to reduced risk of exposure to infection and injury.

Table 3: Items on wellbeing

S/N	Item	SA (%)	A (%)	D (%)	SD (%)	Mean	Std. Dev.
I	Management ensure the payment of the COVID-19 inducement allowance as agreed with by the government and healthcare workers	70 (57.4)	22 (18.0)	21 (17.2)	9 (7.4)	3.25	0.99
Ii	Management ensure the payment of the revised hazard allowance	75 (61.5)	29 (23.8)	10 (8.2)	8 (6.6)	3.40	0.90
Iii	I feel emotionally drained counselling patients	27 (22.1)	39 (32.0)	34 (27.9)	22 (18.0)	2.58	1.03
Iv	I feel fatigued when I get up in the morning and have to face another day on the job	61 (50.0)	13 (10.7)	30 (24.6)	18 (14.8)	2.96	1.16
V	Working with people COVID patients is really a strain on me	18 (14.8)	35 (28.7)	41 (33.6)	28 (23.0)	2.35	0.99
	Overall	Mean = 14.55, Std. Dev. = 3.07					

The level of wellbeing of social workers during COVID-19 pandemic in South-West Nigeria was defined by five items (1-Strongly agree, 2-Agree, 3- Strongly disagree and 4- Disagree). Descriptive statistics was used to analyse the data collected and the results are presented in Table 3. From the test norm level of wellbeing of social workers during COVID-19 pandemic scale, the total maximum score of 20 is permissible. A score of 1-9 points' shows low level of wellbeing of social workers during COVID-19 and 10-20 points indicates high level of wellbeing of social workers during COVID-19. Since the mean(\pm SD) score of the respondents is 14.55(\pm 3.07) as shown in table 3 which falls within the range of 10-20, it can then be concluded a high level of wellbeing of social workers during covid19 pandemic in South-West Nigeria

The study also revealed that out of the five items listed to determine the level of wellbeing of social workers during COVID-19 pandemic in South-West Nigeria, all the items yielded high mean scores between 2.35 and 3.40. With these results, it could be deduced a high level of wellbeing of social workers during COVID-19 pandemic in South-West Nigeria. Globally, COVID-19 pandemic is having a major toll on healthcare's wellbeing. Therefore, there is need to take steps in ensuring the wellbeing of social so that they will be in a better position to respond adequately to the spread of the disease as a sound health and safe work environment are important prerequisite for workers' wellbeing (Ishola, 2017).

Table 4: Multiple Regression Analysis showing relative contribution of occupational safety to wellbeing

Model	Unstandardized Coefficient		Standardized coefficient		T	Sig
	B	Standard Error	β	Rank		
Constant	13.923	.971			14.333	
Safety equipment	-.568	.101	-0.672	1st	-5.606	.000
Safe work environment	.595	.109	0.657	2nd	5.480	.000

$R = .478$, $R^2 = .229$, $Adjusted R^2 = .216$, $Std. Error of the Estimate = 2.720$; *Dependent variable: Wellbeing*

The regression model reveals the relationship of each of the predictors in the prediction of the wellbeing of social workers during COVID19 pandemic in South-West Nigeria. Since the regression weight indicates the relative contribution of each of the predictors, the result in table 4 shows that safety equipment is the most significant predictor of wellbeing of social workers ($\beta = -0.672$, $t = -5.606$, $p < 0.05$) and safe work environment ($\beta = 0.657$, $t = 5.480$, $p < 0.05$) respectively with coefficient of determination of ($R^2 = 0.229$) which means that any variation of wellbeing of social worker accounted for by 22.9% variation in a combination of the predictor variables. Since provision of safety equipment and safe work environment are significant joint predictors of wellbeing of social workers during COVID19 pandemic in South-West Nigeria. The result was consistent regardless of the location of the study or sex of the respondents. This could be represented using the prediction equation (Model) below:

$$\text{Wellbeing of social worker} = a + \beta_1 X_1 + \beta_2 X_2$$

$$\text{Wellbeing of social worker} = 13.923 - 0.672 X_1 + 0.657 X_2$$

Where: a = constant, X_1 = Provision of safety equipment and X_2 = Safe work environment

This implied that the provision of safety equipment and safe work environment contributed to wellbeing. Wellness enhances physical, mental, and social well-being. A healthy and a safe well-functioning work environment form the basis of wellbeing. This study is supported by Adewole (2019) as revealed in this study that poor working conditions and environment are associated with negative wellbeing. These needs include concerns about good working conditions such as adequate remunerations which include prompt payment for hazard/COVID-19 special allowance, provision of safety equipment and a safe work environment to motivate them in the course of fighting the virus.

With the advent of COVID-19, occupational safety should be the healthcare organization philosophy where workplace safety is everyone's concern, and results achieved through integrated programs designed to minimize risks. There is need for a safety culture to complement safety efforts and regulatory guidelines by the World Health Organization (WHO), Centre for Disease Control (CDC) and the Ministry of Health in their effort to eradicate COVID-19 virus infection. It not enough to provide safe work environment and safety equipment during the COVID-19 pandemic but also adequate maintenance to ensure that standards are not compromised, furthermore, all health workers should be properly trained on the use of protective equipment. Workers participation in decision making on safety matters is a symbol of accomplishment that motivates higher sense of wellbeing.

CONCLUSION

This study investigated occupational safety and wellbeing of Social Workers in the Era of Covid-19 Pandemic. Results revealed that there was provision of safety equipment for social workers, there was also provision of a safe work environment for social workers in hospitals and isolation centres during the pandemic. Furthermore, multiple regression analysis revealed that provision of safety equipment and safe work environment are significant joint predictors of wellbeing among social workers during COVID19 pandemic. Based on these findings, healthcare centres should ensure adequate provision and maintenance of safety equipment and ensure that standards are not compromised. Health workers should be properly trained on the use of protective equipment. Government should learn from this sudden pandemic and allocate adequate budget to equip and provide necessary safety materials for social health care workers. The study is limited to registered social workers in designated hospital for the treatment of COVID-19 patients and isolation centres in Lagos and Ibadan in the South-Western Nigeria. Although, the study employed a cross sectional design which does not determine the cause and effect relationship between the variable. Nevertheless, it provides useful information to minimize the spread of the virus and enhance the wellbeing of social workers. Based on the limitation of the study, a National study may be carried out and the sample size increased to include all registered social workers involved in the treatment of COVID-19 patients in Nigeria. Such study will allow for a meaningful comparison among the particularly among different geopolitical zones in the country.

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