

Predictors of Burnout Common Mental Health Problems among Health Care Workers Managing Pmtct Patients in Secondary Health Facilities in Oyo State, Nigeria

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ABSTRACT

The experience of burnout is brought about by continuous exposure to stressors and failure of coping strategies leading to exhaustion. Burnout has detrimental effects to the service provider both physically and psychologically. Few studies have been conducted on stressors and burnout among healthcare workers in PMTCT centers and few steps are being taken by the administrators of the healthcare organizations to mitigate the effect this psychological distress on the healthcare workers. The study employed a descriptive cross-sectional study. The sample size was two hundred and eighty-one. A multistage sampling technique was adopted. Stage 1 used a purposive sampling technique to select secondary healthcare in Oyo state. Stage 2 involved the use of stratified proportionate sampling techniques to allocate 48%, 22%, 21%, 5% and 4% of questionnaires to Nurses, CHO, Doctors, Lab Scientist and SCHEW respectively. Stage 3 involved using a convenience sampling techniques to administer the questionnaire according to healthcare workers. Questionnaire was retrieved, coded and analyzed using SPSS version 23 and results were presented in tables. Result showed that mean age of respondents was 32.9 ± 6.04 . Mean years in service was 8.06 ± 4.41 . Majority (64.8%) had majorly been on day duty. Many (62.6%) respondents who were second line workers. Prominent among the common mental health problems suffered were Insomnia (42%) and headache (48%). About one-fifth (18.5%) were at risk of burnout. One-third (33.8%) experienced high stigmatization. 57.3% experienced on high workload. Interpersonal conflict rate at workplace was minimal. Major organization constraint was use of poor equipment. Demographic variables were associated with burnout ($p < .05$) and common mental health problem ($p < .01$). Burnout was majorly associated with Anxiety ($p < .01$), profession ($p < .05$), workload ($p < .01$). Common mental health problems was found to be associated with one another ($p < .05$). Though the workload decreases as service year increase, respondents majorly faced high workload which is a major predictor of burnout among respondents. It is therefore important that there is reduction in the workload and the shift duties be properly arranged to minimize the risk of burnouts and common mental health problems.

KEYWORDS: *Burnout, healthcare, HIV/AIDS, Infections, workers.*

INTRODUCTION

Burnout has become a subject of concern for institutions and in many occupation settings globally. This is because it has the potentiality of affecting negatively an individual's psychological and physical health as well as the effectiveness of rendering organizational services. International Classification of Diseases (ICD-10-Cm, 2015) classifies burnout under problems related to difficulties in life management. According to Schaufeli, Leiter, Maslach, (2009) in Sweden and Netherlands burnout is a managed using inter disciplinary approach. Physician, psychologists, psychiatrists, counselors and other social scientists are trained to evaluate and manage burnout (Schaufeli et al., 2019).

An efficient work environment needs to produce excellent service and product, encourage brilliant individuals, encourage innovation, invention and modifications, and improve input effort, output as well as outcome of service or product, reduce wastage of resources in the long run, it tends to bring good performance and better economy(Maldonado et al., 2015). Presently, because careers have become multifaceted and complicated, firms must reasonably consider organizational routines and increase assistance (Soelton et al., 2020).

Moreover, the growth of any institution/organization even nation that hosts the institution hangs on the role that organizations whether public or private plays Today most institutions, staffs are working for sake of funds and income. If the employees were not satisfied with their job stress may set in and this may have an adverse effect in the effectiveness of their deliverables. Quite a number of institution such as Health may not afford to have less in the optimization of their service deliverables. It is also acknowledge that, virtually all specialty of health of health is hectic and it is very important to improve any condition or circumstance that could pronounce the hectic nature that triggers stress and lead to burnout.

Burnout has gradually become a key drawback of many individuals who work in different job fields. The working environment is the supreme abode where workers spend most of their lives. They seek happiness, peacefulness and confidence in their work place. However, it is not easy to accomplish these objectives for some reason because many people are going through stress that has led to burnout in these present days (Ceylan and Mohammadzadeh, 2016). Burnout was first described and examined by Freudenberger (1974) as something that involves feeling. Occupational burnout can be defined as a physiological syndrome characterized cynicism, exhaustion, reduced professional efficacy, and depolarization (Maslach and Leiter, 1997;Sedigheh &contemporary society and life (Yaoquin et al.,2020).

Mortality from HIV/ AIDS since its 1981 discovery has risen to over 35 million of lives lost (Oleribe et al, 2017). By the year 2017 the approximate global records of individuals living with HIV/ AIDS stands between 31.1 million – 43.9 million with 1.8 million new infections in that same year. Majority of this population were adults (86%). Eastern and southern Africa share a total population of 19.6 million (53.1%) people living with HIV/AIDS (PLWHIV) while 6.1 million (16.5%) are in western and central Africa. A round figure of 670,000 – 1.3 million deaths from AIDS – related illnesses were reported across the globe in 2017. Nigeria's prevalence curve in the last few decades have hovered between lows of 1.8% in 1991 through 5.8% and 3.0% in 2001 and 2014 respectively to 2.9% in 2016 (FMoH, 2014; UNAIDS, 2018)].

According to country by country rating Nigeria currently has the second largest HIV epidemic in the world. The country presently has 3.2million PLWHIV with an approximate value of 160,000 AIDS-related deaths annually. Of the estimated 220,000 new infections in Nigeria, 16.8% were from mother-to-child transmission. Rivers state account for the highest account of PLWHIV as at 2017, with a prevalence that ranged between 4.1 – 6.0% (UNAIDS, 2018; WHO&UNAIDS, 2016; NACA,

2016). Notwithstanding the increasing access to antiretroviral therapy (ART) and the gradual declining in the occurrence of HIV/AIDS and related deaths, number of new infections amongst the poorly educated and low income group continues to rise in certain countries and has regressed in others.

The prevalence of fresh HIV infection is thus, persistently high in several countries across the sub-Saharan with South Africa (23%), Nigeria (15%), Uganda (10%), Mozambique (8%) and Kenya (7%) ranked top (UNAIDS, 2018; Singh et al, 2018; Kharsanyi et 2016). HIV could be a huge obstacle of concern to the attainment of the Sustainable Development Goals (SDGs) which has a paramount interest in the 3rd goal that pertain to the healthy living and promotion of well-being for all. This include the pledge to terminate the scourge of infectious diseases and elimination of epidemics across the globe inclusive of HIV/ AIDS and tuberculosis by 2030 (Kasonde et al, 2018).

There is a need to comprehensively investigate common mental health-related causes of health care personnel delivering PMTCT services to unravel personal and work-related conditions that hinder optimum and quality care that would drive and increase patients' uptake and compliance with the care. This understanding is critical for implementing care and also for maintaining patients' optimal quality of life. This study therefore will determine the factor influencing common mental health conditions of HIV/AIDS and PMCTC care workers of Secondary Healthcare in Oyo. State, Nigeria. The outcome of this research can be used by decision-makers to improve occupational-related welfare of health-workers caring with HIV patients within sub-Saharan African.

Broad Objective

The General objective of this study is to determine the prevalence of common mental health problems and its associated factors among health care workers managing HIV/AIDS patients in Secondary Healthcare in Oyo State, Nigeria

Specific Objectives

To identify the work related characteristics of the healthcare worker managing HIV patients in PMTCT centers in secondary healthcare in Oyo state.

To determine the prevalence of common mental health problems among health workers managing HIV patients in PMTCT centers in secondary healthcare in Oyo state.

To determine the level and risk of burnout among healthcare workers managing HIV patients in PMTCT centers in secondary healthcare in Oyo state.

To determine the association between common health problems affecting healthcare workers managing HIV patients in PMTCT centers in secondary healthcare in Oyo State and Burnout.

METHODOLOGY

Study Area

This study was conducted in tertiary hospital, Oyo State. Oyo, usually referred to as Oyo State to distinguish it from the city of Oyo, is an inland state in southwestern Nigeria. Its capital is Ibadan, the third most populous city in the country and formerly the second most populous city in Africa. Oyo State is bordered to the north by Kwara State, to the east by Osun State, and to the southwest by Ogun State and the Republic of Benin. With a projected population of 7,840,864 in 2016, Oyo State is the fifth most populous in Nigeria.

A descriptive cross-sectional study was conducted among health care providers working at the PMTCT unit in Secondary Healthcare facilities in Oyo State, Nigeria using adapted and semi-structured questionnaires, interviewer-administered. The study population will consist of all cadres of

health care workers providing services for patients in the PMTCT units of Oyo State Secondary Healthcare facilities, Oyo, Nigeria. This study employed a multistage sampling technique. The semi-structured questionnaire was used for the data collection

Data management and presentation

All data collected were entered coded, clean, and analyzed with SPSS statistics version 20. Descriptive analysis was done using frequency tables, percentages, and also inferential statistics were used to determine the level of association between independent variables and dependents variables where needed at p-value less than 0.05

RESULTS

Socio-demographic characteristics

The table below shows the socio demographic characteristics of the respondents. The study revealed that respondents' age ranged between 25years and 52years with the mean age being 32.9 ± 6.04 . It was revealed that there were more female gender (71.5%). Many respondents (69%) were married. There were more nurses (48.4%) and this is followed by CHO (22.1%) and Doctors (21%). Other respondents (4.6% and 3.9%) were Lab Scientists and SCHEW respectively. **Respondents' years in service ranges between 3years and 20years with the mean age being 8.06 ± 4.41 .**

Socio-demographic characteristics

Variable	Frequency (281)	Percentage (100)
Gender		
Male	80	28.5
Female	201	71.5
Family status		
Single	87	31.0
Married	194	69.0
Health-worker title		
Nurse	136	48.4
SCHEW	11	3.9
Doctor	59	21.0
CHO	62	22.1
Lab Scientist	13	4.6
Years in Service		
Minimum	3	
Maximum	20	
Mean \pm S.D.	8.06 ± 4.41	
Age at last birthday		
Minimum	25	
Maximum	52	
Mean \pm S.D.	32.9 ± 6.04	

Work-related characteristics

The table below shows the work-related characteristics of the respondents. There were more respondents (64.8%) who had majorly been on day duty for about a month. Others (22.1% and 3.2%) respectively were on night and alternate shift respectively. Almost half of the respondents (43.8%) mentioned that their health status was very good while others (56.2%) indicated that their health

status was good. Majority (77.6%) were satisfied with their work. There were more (62.6%) respondents who were second line workers.

Work-related characteristics

Variable	Frequency (281)	Percentage (100)
Shift duty in the last one month		
Night	62	22.1
Day	182	64.8
Alternate	37	13.2
Health Status Perception		
Good	158	56.2
Very Good	123	43.8
Satisfaction with work		
Intermediate	26	9.3
Good	218	77.6
Very Good	37	13.2
Category of workers' closeness in HIV patients' care		
First Line Workers	105	37.4
Second Line	176	62.6

Prevalence of common mental health problems among health workers

The table below shows the common mental health problems among health workers in the last one month. It was found that all healthcare workers suffer from at least one of the common mental health problem listed. Almost half of the respondents (42%) suffer from insomnia, about one-third (29.9%) suffer from depression, one-fifth experienced anxiety, one-third (34.9) found it hard to sleep without the use of agent, almost half (48%) suffer from headache, one-fifth (19.9%) were stigmatized, while some also suffer from somatization. Overall, healthcare workers suffer more from headache and insomnia with prevalence of 48% and 42% respectively.

Common mental health problems in the last one month

Variable	Frequency (281)	Percentage (100)
Insomnia		
Yes	118	42.0
No	163	58.0
Depression		
Yes	84	29.9
No	197	70.1
Anxiety		
Yes	56	19.9
No	225	80.1
Use of Agent		
Yes	98	34.9
No	183	65.1
Headache		
Yes	135	48.0
No	146	52.0

Stigmatization		
Yes	56	19.9
No	225	80.1
Somatization		
Yes	76	27.0
No	205	73.0

Burnout among health care workers

The table below shows the common mental health characteristics of healthcare workers. There is a scale from 0 to 6. Zero being the least score and six being the highest score. Less than a quarter of the respondents (20.6%) put the score of the emotional drain at work on a scale of 3, in total, less than half (24.9% and 20.6%) respectively indicated that they feel used up at the end of the work day with a score of 1 and 2 respectively. Half of the respondents (50.9) who indicated with a score of 1 mentioned that they fell fatigued when they get up in the morning and had to face another day on the job. The score of respondents understanding of how their patients feel were 1, 2, 3 and 4 indicating 52%, 18.1%, 12.1% and 17.8% respectively. More than half of the respondents (43.4% and 8.5%) indicated a score of 1 and 2 respectively on treating patients as if they were impersonal objects. Many respondents (66.2%) indicated that working with people all day is not a stress.

There were more respondents (49.1% and 29.9%) indicating a score of 1 and 4 respectively who mentioned that they deal effectively with the problems of their patients. Majority of the patients mentioned that they do not feel burn out from work. Many respondents (45.2%) who indicated with a score of 1 felt they positively influence other people's life through their work. All respondents (100%) mentioned that they have never callous towards their patients since taking the job. Almost half of the respondents (27.4% and 20.6%) with scores 1 and 2 respectively indicated that they worry that the job is hardening them emotionally. Almost all the respondents mentioned that they feel energetic with scores 1(63.3%), 3 (20.6) and 5 (9.3%). None of the respondents (0%) felt frustrated by their job. About one-third (29.9%) with a score of 2 felt they are working too hard on the job.

Few respondents (20.6%) who indicated with a score of 1 mentioned that they do not really care what happens to some patients. Respondents (49.1% and 20.6%) who indicated with a score of 1 and 3 claimed they easily create a relaxed atmosphere with patients. Many respondents feel exhilarated after working closely with patients. Overall, more than half of the respondents (22.1%, 8.5%, 12.1% and 9.3%) indicating with scores 1, 4, 5, 6 claimed to have accomplished many worthwhile things in this job. About one-third of the respondents (29.9%) felt they were at the end of their rope. Almost all respondents mentioned that they deal with emotional problems very calmly.

Burnout characteristics of health care workers

Variable	Frequency (281)	Percentage (100)
I feel emotionally drained from my work		
0	189	67.3
1	8	2.8
2	26	9.3
3	58	20.6
I feel used up at the end of the workday		
0	127	45.2
1	70	24.9
2	58	20.6
3	26	9.3

I feel fatigued when I get up in the morning and have to face another day on the job		
0	138	49.1
1	143	50.9
I can easily understand how my patients feel about things		
1	146	52.0
2	51	18.1
3	34	12.1
4	50	17.8
I feel I treat some patients as if they were impersonal objects		
0	135	48.0
1	122	43.4
2	24	8.5
Working with people all day is really a strain for me		
0	186	66.2
1	45	16.0
2	50	17.8
I deal very effectively with the problems of my patients		
0	59	21.0
1	138	49.1
4	84	29.9
I feel burned out from my work		
0	197	70.1
2	84	29.9

Burnout characteristics of health care workers (Cont'd)

Variable	Frequency (281)	Percentage (100)
I feel I'm positively influencing other people's lives through my work		
0	59	21.0
1	127	45.2
2	11	3.9
3	24	8.5
4	34	12.1
5	26	9.3
I've become more callous toward their patient since I took this job		
0	281	100.0
I worry that this job is hardening me emotionally		
0	146	52.0
1	77	27.4
2	58	20.6
I feel very energetic		
0	19	6.8
1	178	63.3
3	58	20.6
5	26	9.3
I feel frustrated by my job		
0	281	100.0
I feel I'm working too hard on my job		
0	186	66.2

1	11	3.9
2	84	29.9
I don't really care what happens to some patients		
0	223	79.4
1	58	20.6
Working with people directly puts too much stress on me		
0	197	70.1
1	58	20.6
2	26	9.3
I can easily create a relaxed atmosphere with my patients		
0	59	21.0
1	138	49.1
3	58	20.6
5	26	9.3

Burnout characteristics of health care workers (Cont'd)

Variable	Frequency (281)	Percentage (100)
I feel exhilarated after working closely with my patients		
0	70	24.9
1	153	54.4
2	58	20.6
I have accomplished many worthwhile things in this job		
0	135	48.0
1	62	22.1
4	24	8.5
5	34	12.1
6	26	9.3
I feel like I'm at the end of my rope		
0	197	70.1
1	84	29.9
In my work, I deal with emotional problems very calmly		
0	8	2.8
1	127	45.2
2	62	22.1
3	58	20.6
4	26	9.3
I feel recipients blame me for some of their problems		
0	146	52.0
1	135	48.0

Risk of burnout among healthcare workers

The table below shows the risk of burnout among health workers. The burnout scores indicated by the respondents was summed, averaged and compressed to form scores between 1 and 5. Scores from 1.00 – 2.58 were categorized as no risk of burnout, 2.59 – 3.01 was categorized as being at risk of burnout while scores 3.02 – 5.00 were categorized as very high risk of burnout. Overall, it was revealed that about one-fifth (18.5%) were at risk of burnout.

Risk of burnout among healthcare workers

Variable		Frequency (281)	Percentage (100)
Burnout	No risk of Burnout	229	81.5
	At risk of Burnout	52	18.5

Association between Common mental health problems and Burnout

The above table shows the association between Common mental health problems and Burnout among the respondents. Here, a layered crosstab of common mental health problems by risk of burnout was shown alongside the Chi Square value, degree of freedom, p-value and the outcome of the chi square test. It was revealed that though there was no statistically significant association between Insomnia and burnout, about one-fifth of those suffering from Insomnia were at risk of burnout. Similarly, there was no statistically significant association between depression and burnout, about one-fifth (21.4%) of those who suffer depression are at the risk of burnout. Conversely, there was a statistically significant association between Anxiety and burnout ($p = .01$) and one-third (30.4%) who suffer from anxiety were also at a risk of burnout.

About one-fifth (18.4%) of those who use agent to sleep were at a risk of burnout though the study revealed no statistically significant association. Another common mental health problem was Headache and few people who suffered from this were at the risk of burnout but there was no statistically significant association. About one-third of the respondents (30.4%) who were stigmatized were at risk of burnout and this showed a statistically significant association ($p = .01$). Conversely, there was no statistically significant association between Somatization and Burnout even though about one-fourth (25%) who were at risk of burnout suffered from somatization. Common mental health problems such as Anxiety ($X^2(1) = 6.51$, $p = .01$) and Stigmatization ($X^2(2) = 6.51$, $p = .01$) were significantly related to risk of burnout.

Association between Common mental health problems and Risk of Burnout

Common mental health problems		Risk of Burnout		X ²	DF	P	Outcome
		No Risk	At Risk				
Insomnia	Yes	98(83.1)	20(16.9)	.34	1	.57	N.Sig.
	No	131(80.4)	32(19.6)				
Depression	Yes	66(78.6)	18(21.4)	.68	1	.41	N.Sig.
	No	163(82.7)	34(17.3)				
Anxiety	Yes	39(69.6)	17(30.4)	6.51	1	.01	Sig
	No	190(84.4)	35(15.6)				
Use of Agent	Yes	80(81.6)	18(18.4)	.002	1	.97	Sig.
	No	149(81.4)	34(18.6)				
Headache	Yes	112(83)	23(17)	.37	1	.54	N.Sig.
	No	117(80.1)	29(19.9)				
Stigmatization	Yes	39(69.6)	17(30.4)	6.51	1	.01	Sig.
	No	190(84.4)	35(15.6)				
Somatization	Yes	59(77.6)	17(22.4)	1.03	1	.31	N.Sig
	No	170(82.9)	35(17.1)				

DISCUSSION, CONCLUSION AND RECOMMENDATION

Discussion

Three hundred and ten respondents were recruited into this study. However two hundred and eighty one respondents completed the questionnaire resulting in a 90% response rate. Majority of the respondents (64.8%) had majorly been on day duty. The study found almost half of the respondents (43.8%) to have a very good health status. Many (62.6%) respondents who were second line workers.

The study found that healthcare workers suffer more from headache and insomnia with prevalence of 48% and 42% respectively and this is similar to Saragih et.al. (2021) where headache and insomnia were also prevalent. The study found about one-fifth (18.5%) to be at risk of burnout. This prevalence was lesser compared to Hert (2020) where the burnout among healthcare workers was 43%

The study revealed that that common mental health problems associated with health workers closeness in HIV patient care were Insomnia ($X^2(1) = 15.8, p < .00$), Depression ($X^2(1) = 15.5, p < .00$), Headache ($X^2(1) = 14.8, p < .00$) and Somatization ($X^2(1) = 12.2, p < .01$). Overall, there were more second line healthcare worker who had more common mental health problems. The study found that there was a statistically significant relationship between health workers' profession and associated common mental health problems with Insomnia ($X^2(4) = 11.7, p = .02$), Depression ($X^2(4) = 11.6, p = .021$), Anxiety ($X^2(4) = 11.5, p = .021$), Use of Agent ($X^2(4) = 9.7, p = .04$) Stigmatization ($X^2(4) = 11.5, p = .021$) and Somatization ($X^2(4) = 10.2, p = .03$).

The study revealed that there was a statistically significant relationship between Risk of Burnout and Workload ($X^2(1) = 5.9, p = .016$). The study found Depression was positively associated with Insomnia ($r = .200, p < .01$). Use of Agent was positively associated with Anxiety ($r = .158, p < .01$). Headache was positively associated with Insomnia ($r = .885, < = .00$) and Depression ($r = .150, p < .05$). Stigmatization was positively associated with Anxiety ($r = 1.00, p < .00$) and Use of Agent ($r = .158, p < .01$). Somatization was positively associated with Insomnia ($r = .180, p < .01$), Depression ($r = .932, p = .00$) and Headache with ($r = .120, p < .05$).

Conclusion

The findings revealed that prominent among the mental health problems faced was headache followed by Insomnia. Though the study revealed that the workload of majority of the respondents was high, one-fifth were at the risk of burnout which increases with workload. Increase in year of service is associated with decrease workload. Workload is associated with burnout which is in turn associated with the common mental health problems. It is therefore important that there is reduction in the workload and the shift duties be properly arranged to minimize the risk of burnouts and common mental health problems among healthcare workers managing HIV/AIDS patients

Recommendation

Based on the findings from this study, the following recommendations were made:

There is need to employ more healthcare workers so that there would be reduction in workload. In the absence of that, Task Shifting and Task sharing (TSTS) could also be used (Improvise) to address staff shortage to reduce workload.

There should be regular checkups for healthcare to properly monitor their health status.

Health authorities should consider setting up multidisciplinary common mental health teams at regional and national levels for dealing with common mental health issues and providing psychological support to both patients and Healthcare Workers.

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