# Socio-Demographic Charateristics Associated with the 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. Therefore this study aimed to determine the socio-demographic factors associated with common mental health problems among health care workers managing HIV/AIDS patients in Secondary Healthcare in Oyo State, Nigeria

The study employed a descriptive cross-sectional study. The sample size was two hundred and eighty-one. A multistage sampling technique was adopted. Questionnaires were distributed, retrieved, coded and analyzed using SPSS version 21 and results were presented in tables and frequencies. Result showed that mean age of respondents was  $32.9\pm6.04$ . Mean years in service was  $8.06 \pm 4.41$ . Majority (64.8%) had majorly been on day duty. 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<.05). Burnout was majorly associated with Anxiety (p<.05), profession (p<.05), workload (p<.05).

Though the workload decreases as service year increase, respondents majorly faced high workload which is a major predictor of burnout among respondents. Therefore it is recommended that 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 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). Not-withstanding 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-Sahara 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.

## Objectives

## **Broad Objective**

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

Specific Objectives were:

- 1. What are the work-related characteristics of the healthcare worker managing HIV patients in PMTCT centers in Secondary Healthcare in Lagos State?
- 2. What is the prevalence of common mental health problems among health workers managing HIV patients in PMTCT centers in Secondary Healthcare in Lagos State?
- 3. What is the level and risk of burnout among healthcare workers managing characteristic PMTCT centers in Secondary Healthcare in Lagos State?
- 4. What is the association between burnout and socio-demographic characteristics of healthcare workers managing HIV patients in PMTCT centers in Secondary Healthcare in Lagos State?

### METHODOLOGY

#### Study Area

This study was conducted in a 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 semistructured 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**

Table 4.1 shows the socio demographic characteristics of the respondents. The study revealed that respondents' age ranged between 25years and 52years with the mean age being  $32.9\pm6.04$ . 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  $8.06 \pm 4.41$ .

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	
СНО	62 22.1	
Lab Scientist	13 4.6	
Years in Service		
Minimum	3	
Maximum	20	

Mean $\pm$ S.D.	$8.06 \pm 4.41$
Age at last birthday	
Minimum	25
Maximum	52
Mean±S.D.	32.9±6.04

#### 4.2 Work-related characteristics

Table 4.2 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 13.2%) 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.

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				

#### **Table 4.2: Work-related characteristics**

### **4.3 Prevalence of common mental health problems among health workers**

Table 4.3 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.

### Table 4.3: 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

ISSN 2694-9970

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

### 4.4 Burnout among health care workers

Table 4.4 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 (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.

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 fe	el used up at the end of the work	day	
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 fa	ce 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	4 50 17		
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	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	

## Table 4.4: Burnout characteristics of health care workers

## Table 4.4b: 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

ISSN 2694-9970

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	100.0				
I feel I'm working too hard on my job					
0	0 186				
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			

## Table 4.4c: 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 accord	mplished many worthwhile thing	s 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	

ISSN 2694-9970

3	3 58		
4	26	9.3	
I feel recipients blame me for some of their problems			
0 146 52.0			
1	135	48.0	

### 4.5 Risk of burnout among healthcare workers

Table 4.5 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.

Table 4.5: Risk	of burnout	among healthcare	workers
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Variable		Frequency (281)	Percentage (100)
Burnout	No risk of Burnout	229	81.5
	At risk of Burnout	52	18.5

### 4.6 Relationship between Socio-demographic characteristics and Burnout

Table 4.06 shows the relationship between risk of burnout and socio-demographic characteristics of the respondents. Here, a layered crosstab of the socio-demographic of respondents 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 almost half of the male respondents (42.7%) were at risk of burnout while just a few (9%) of the female respondents were at risk of burnout. Respondents' gender was found to be statistically significant with risk of burnout (p = .00). In contrast, though there was no statistically significant association between marital status and risk of burnout, the study revealed that married respondents (19.1%) were slightly more at risk than single respondents (17.2%).

There was a statistically significant relationship between respondents' profession and risk of burnout (p = .021). Compared to other healthcare profession (Nurses, CHO and SCHEW) with 18.4%, 9.7% and 0% respectively at risk of burnout, Doctors (30.5%) and Lab Scientists (23.1%) were more at risk of burnout. Years in service is also a determinant of risk of burnout as the study showed a statistically significant association between years in service and risk of burnout (p = .005) where respondents (31.2%) with years of experience between 11 to 15years were most at risk of burnout compare to those with less than 5years (15.3%) and those with 6 to 10years of work experience.

There was a statistically significant association between respondents' age and risk of burnout (p = .04). Respondents aged 40years and above were more at risk of burnout (23.6%). Closer to this were respondents aged 31 – 40years of age with 23.6% at the risk of burnout. Participants socio-demographic characteristics of the respondents such as Gender ( $X^2(1) = 42.7$ , p = .00), Profession ( $X^2(4) = 11.5$ , p = .021), Years in Service ( $X^2(3) = 12.9$ , p = .005) and Age ( $X^2(2) = 6.2$ , p = .04) were significantly related to risk of burnout.

				$X^2$	DF	Р	Outcome
Socio-		Risk of burnout					
demographic		No Risk At Risk					
Characteristics		N(%)	N(%)				
Gender	Male	46 (57.5)	34 (42.5)	42.7	1	.00	Sig.

ISSN 2694-9970

	Female	183 (91)	18 (9)				
Marital Status	Single	72(82.8)	15(17.2)	.13	1	.87	N.Sg
	Married	157(80.9)	37(19.1)				0
	Nurse	111(81.6)	25(18.4)				
	SCHEW	11(100)	0(0)				
Profession	Doctor	41(69.5)	18(30.5)	11.5	4	.021	Sig.
	СНО	56(90.3)	6(9.7)				
	Lab Scientist	10(76.9)	3(23.1%)				
	Less than 5 years	116(84.7)	21(15.3)				
	6 – 10years	49(87.5)	7(12.5)				
Years in Service	11 – 15years	53(68.8)	24(31.2)	12.9	3	.005	Sig.
	16 – 20years	ale $183 (91)$ $18 (9)$ gle $72(82.8)$ $15(17.2)$ .13ied $157(80.9)$ $37(19.1)$ .13se $111(81.6)$ $25(18.4)$ EW $11(100)$ $0(0)$ tor $41(69.5)$ $18(30.5)$ O $56(90.3)$ $6(9.7)$ ientist $10(76.9)$ $3(23.1\%)$ $15years$ $116(84.7)$ $21(15.3)$ years $49(87.5)$ $7(12.5)$ byears $114(87.7)$ $16(12.3)$ years $94(76.4)$ $29(23.6)$ above $21(75)$ $7(25)$					
	21 – 30years	114(87.7)	16(12.3)				
Age	31 - 40 years	94(76.4)	29(23.6)	6.2	2	.04	Sig.
Marital Status Profession Years in Service Age	40vears above	21(75)	7(25)				

### Relationship between Socio-demographic characteristics and Insomnia

Table 4.07 shows the relationship between socio-demographic characteristics of the respondents and Insomnia. Here, a layered crosstab of the socio-demographic of respondents by Insomnia was shown alongside the Chi Square value, degree of freedom, p-value and the outcome of the chi square test. The study revealed that there were more female respondents (43.8%) who suffered from insomnia though there was no statistically significant association between gender and insomnia. Insomnia had a strong statistically relationship with marital status. Compared to single healthcare workers, married healthcare workers suffered more from insomnia. Compared to other healthcare workers, SCHEW (63.6%) suffered more from insomnia. CHO (56.5%) and Lab Scientist (53.8%) both had almost the same percentage of respondents suffering from insomnia. Insomnia had a statistically significant

There was a strong statistically significant relationship between respondents' year of service and insomnia (p = .00). Compared to other healthcare years in service, respondents with 16 – 20years suffered more from insomnia. This is followed by those (58.9% and 57.1%) who had spent 6 – 10years and 11 – 15years in service respectively. Insomnia was found to be statistically significant with respondents' age (p = .00). Compared to other age categories, respondents who were aged 40years and above (75%) suffered more from Insomnia. Participants socio-demographic characteristics such as Marital Status ( $X^2(1) = 42.6$ , p = .00), Profession ( $X^2(4) = 11.68$ , p = .02), Years in Service ( $X^2(3) = 35.5$ , p = .00) and Age ( $X^2(2) = 14.1$ , p = .00) were significantly related to Insomnia.

				$X^2$	DF	P	Outcome
Socio-		Inso	Insomnia				
demographic		Yes	No				
Characteristics		N(%)	N(%)				
Gender	Male	30(37.5)	50(62.5)	.93	1	.34	N.Sig
	Female	88(43.8)	113(56.2)				
Marital Status	Single	11(12.6)	76(87.4)	44.6	1	.00	Sig.
	Married	107(55.2)	87(44.8)				
	Nurse	48(35.3)	88(64.7)				

Table 4.07: Relationship between Socio-demographic characteristics and Insomnia

	SCHEW	7(63.6)	4(36.4)				
Profession	Doctor	21(35.6)	38(64.4)	11.68	4	.02	Sig.
	СНО	35(56.5)	27(43.5)				
	Lab Scientist	7(53.8)	6(46.2)				
	Less than 5 years	34(24.8)	103(75.2)				
	6 – 10years	33(58.9)	23(41.1)				
Years in	11 – 15years	44(57.1)	33(42.9)	32.5	3	.00	Sig.
Service	16 – 20years	7(63.6)	4(36.4)				
	21 – 30years	48(36.9)	82(63.1)				
Age	31 - 40 years	49(39.8)	74(60.2)	14.1	2	.00	Sig.
	40years above	21(75)	7(25)				

ISSN 2694-9970

## 4.08: Relationship between Socio-demographic characteristics and Depression

Table 4.08 shows the relationship between socio-demographic characteristics of the respondents and depression. Here, a layered crosstab of the socio-demographic of respondents by depression was shown alongside the Chi Square value, degree of freedom, p-value and the outcome of the chi square test. The study revealed that almost half of the male respondents (42.5%) suffered depression. A statistically significant association was revealed between gender and Depression. Depression had a statistically relationship with marital status. Compared to single healthcare workers, married respondents (34.5%) suffered depression more. Compared to other healthcare workers, SCHEW (45.5%) and Doctors (40.7%) suffered depression more. Depression had a statistically significant association with respondents' profession.

Respondents who had spent between 11 - 15years in service (51.9%) and those who had spent (16 – 20years in service suffered depression more. Depression was statistically significant with years of service (p = .00) and Age (p = .00). Compared to other age category, respondents aged 40years and above suffered more from depression. Depression was significantly related to participants socio-demographic characteristics with Gender ( $X^2(1) = 8.5$ , p = .004), Marital Status ( $X^2(1) = 6.5$ , p = .01), Profession ( $X^2(4) = 11.6$ , p = .02), Year in service ( $X^2(3) = 34.9$ , p = .00) and Age ( $X^2(2) = 28.8$ , p = .00).

				X2	DF	P	Outcome
Socio-		Depr					
demographic		Yes	No				
Characteristics		N(%)	N(%)				
Gender	Male	34(42.5)	46(57.5)	8.5	1	.004	Sig.
	Female	50(24.9)	151(75.1)				
Marital Status	Single	17(19.5)	70(80.5)	6.5	1	.01	Sig.
	Married	67(34.5)	127(65.5)				
	Nurse	42(30.9)	94(69.1)				
	SCHEW	5(45.5)	6(54.5)				
Profession	Doctor	24(40.7)	35(59.3)	11.6	4	.02	Sig.
	СНО	9(14.5)	53(85.5)				
	Lab Scientist	4(30.8)	9(69.2)			r         r         Outcom           1         .004         Sig.           1         .01         Sig.           4         .02         Sig.           3         .00         Sig.	
	Less than 5 years	20(14.6)	117(85.4)				
	6 – 10years	19(33.9)	37(66.1)				
Years in	11 – 15years	40(51.9)	37(48.1)	34.9	3	.00	Sig.

 Table 4.08: Relationship between Socio-demographic characteristics and Depression

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#### ISSN 2694-9970

Service	16-20years	5(45.5)	6(54.5)				
Age	21 - 30years	19(14.6)	111(85.4)				
	31 - 40 years	50(40.7)	73(59.3)	28.8	2	.00	Sig.
	40years above	15(53.6)	13(46.4)				

### 4.09: Relationship between Socio-demographic characteristics and Anxiety

Table 4.09 shows the relationship between socio-demographic characteristics of the respondents and Anxiety. Here, a layered crosstab of the socio-demographic of respondents by Anxiety was shown alongside the Chi Square value, degree of freedom, p-value and the outcome of the chi square test. The study revealed that more male respondents (28.8%) expressed anxiety. A statistically significant association was revealed between gender and Anxiety. Compared to other healthcare workers, SCHEW (45.5%) and Lab Scientists (38.5%) expressed anxiety. Thus, anxiety is statistically associated with respondents' profession. Anxiety was expressed more by respondents (45.5%) who had spent between 16 and 20years in service. Consequently, anxiety was found to be associated with years in service (p = .02).

Though the study revealed that anxiety is not statistically associated with respondent's age, those (35.7%) expressed anxiety than other age categories. Respondents' socio demographic characteristics such as Gender ( $X^2(1) = 5.5$ , p = .02), Profession ( $X^2(4) = 11.54$ , p = .02) and Years in Service ( $X^2(3) = 9.88$ , p = .02) was associated with anxiety.

				$X^2$	DF	Р	Outcome
Socio-		Anz	xiety				
demographic		Yes	No				
Characteristics		N(%)	N(%)				
Gender	Male	23(28.8)	57(71.3)	5.5	1	.02	Sig.
	Female	33(16.4)	168(83.6)				
Marital Status	Single	18(20.7)	69(79.3)	.05	1	.83	N.Sig.
	Married	38(19.6)	156(80.4)	1			
	Nurse	27(19.9)	109(80.1)				
Profession	SCHEW	5(45.5)	6(54.5)			.021	
	Doctor	13(22)	46(78)	11.54	4		Sig. N.Sig. Sig. Sig. N.Sig
	СНО	6(9.7)	56(90.3)				
	Lab Scientist	5(38.5)	8(61.5)				
	Less than 5 years	23(16.8)	114(83.2)				
	6 – 10years	7(12.5)	49(87.5)				
Years in Service	11 – 15years	21(27.3)	56(72.7)	9.88	3	.02	Sig.
	16 – 20years	5(45.5)	6(54.5)				
	21 - 30 years	21(16.2)	109(83.8)				
Age	31 - 40 years	25(20.3)	98(79.7)	5.55	2	.06	N.Sig
	40years above	10(35.7)	18(64.3)				

Table 4.10: Relationship between Socio-demographic characteristics and Anxiety

## 4.10: Relationship between Socio-demographic characteristics and Headache

Table 4.17 shows the relationship between socio-demographic characteristics of the respondents and headache. Here, a layered crosstab of the socio-demographic of respondents by headache was shown alongside the Chi Square value, degree of freedom, p-value and the outcome of the chi square test. The study revealed that headache was not statistically significant with respondents' gender.

Compared to single respondents (24.1%), married respondents (58.8%) suffer more from headache. There was a strong association between headache and marital status (p = .00)

Though the study revealed no statistically significant association between headache and profession, it was revealed that more SCHEW (63.6%), CHO (58.1%) and Lab Scientists (53.8%) suffered headache. Headache was found to be statistically associated with years in service (p = .00) with more respondents suffering headache being those who had spent between 6 to 10years in service (66.1%), and those (63.6%) who had spent between 16 to 20years in service. Respondents' age was another variable statistically associated with headache (p = .00). Respondents aged 40years and above suffered headache that those aged less than 40years. Respondents' socio demographic characteristics such as marital status ( $X^2(1) = 28.85$ , p = .00), years in service ( $X^2(3) = 25.26$ , p = .00) and age ( $X^2(2) = 12.21$ , p = .00) was associated with headache.

			$X^2$	DF	Р	Outcome	
Socio-		Head	lache				
demographic		Yes	No				
Characteristics		N(%)	N(%)				
Gender	Male	37(46.3)	43(53.8)	.14	1	.704	N.Sig.
	Female	98(48.8)	103(51.2)				
Marital Status	Single	21(24.1)	66(75.9)	28.85	1	.00	
	Married	114(58.8)	80(41.2)	1			
	Nurse	56(41.2)	80(58.8)				
Profession	SCHEW	7(63.6)	4(36.4)				
	Doctor	29(49.2)	30(50.8)	6.34	4	.175	
	СНО	36(58.1)	26(41.9)				
	Lab Scientist	7(53.8)	6(46.2)				
	Less than 5 years	45(32.8)	92(67.2)				
	6 – 10years	37(66.1)	19(33.9)				
Years in Service	11 - 15 years	46(59.7)	31(40.3)	25.26	3	.00	
	16 – 20years	7(63.6)	4(36.4)				
	21 - 30 years	55(42.3)	75(57.7)				
Age	31 - 40 years	58(47.2)	65(52.8)	12.21	2	.00	
	40years above	22(78.6)	6(21.4)				

Table 4.11: Relationship	) between Soci	io-demographic	characteristics an	d Headache
		· · · · · · · · · · · · ·		

## Table 4.12: Association between common mental health problems affecting healthcare workers

1. Table 4.12 shows the effect of using a Pearson correlation coefficient test to show the relationship between common mental health problems affecting healthcare workers managing HIV patients. Information from the table showed that the common mental health problems are associated. 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).

		Mean	S.D	1	2	3	4	5	6	7
1	Insomnia	1.58	.494	1						
2	Depression	1.70	.459	.200**	1					
				.001						
3	Anxiety	1.80	.400	.009	.044	1				
				.884	.463					
4	Use of Agent	1.65	.477	002	.093	.158**	1			
				.969	.120	.008				
5	Headache	1.52	.501	.885**	.150*	.037	.014	1		
				.000	.012	.533	.819			
6	Stigmatization	1.80	.400	.009	.044	$1.000^{**}$	.158**	.037	1	
				.884	.463	.000	.008	.533		
7	Somatization	1.73	.445	.180**	.932**	.037	.042	.120*	.037	1
				.002	.000	.535	.484	.044	.535	

Table 4.12: Correlation matrix among common mental health problems affecting healthcare workers

Level of Significance: \*\* p<0.00, \* p<0.05

## 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 = .100, 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

196

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:

- 1. 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.
- 2. There should be regular checkups for healthcare to properly monitor their health status.
- 3. 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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