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The Prevalence and Association Between Work -place Stress and Anxiety, Depression and Substance Use Among Human Resources Managers in Various Sectors in Nairobi Metropolitan, Kenya

Tazminin Alibhai, Psy.D. Candidate in Clinical Psychology;
Michelle Karume, Ph.D; & Stella Nyagwencha, Ph.D.,
United States International University – Africa.

Abstract

The present study investigated the prevalence and association between work-related stress, anxiety, depression and substance use across a section of human resources directors, managers, assistant managers and supervisors in Nairobi Metropolis, Kenya. Analytical cross-sectional design was used for the study, where the sampling technique was purposive. Data was collected from 201 participants. Participants were invited via email invitation and on the social media platform LinkedIn. The Cohen Perceived Stress Scale (CPSS) was used to assess stress, Beck's Anxiety Inventory (BAI) for anxiety, Beck Depression Inventory-II (BDI-II) for depression and the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) for substance use. Findings from the study showed that stress scores were strongly positively correlated with anxiety scores, $r(199) = .584$, $p < .001$, followed by depression scores, $r(199) = .578$, $p < .001$, and alcohol use scores, $r(199) = .178$, $p < .001$ respectively, and lastly least positively correlated with sedatives scores, $r(199) = .157$, $p < .001$. The output of the binary logistic regression analysis found that depression scores were positive and significant ($b = .192$, $se = .068$, $p = .005$) correlates of the stress levels in participants of the current study. This study contributes to literature on workplace stress by raising awareness on mental wellness in the workplace and to promote mental wellbeing among organizations in Kenya.

Key Words: Workplace, stress, anxiety, depression, substance use, managers, Kenya

Introduction and Background

According to The International Labour Organization (ILO, 2018), work-related stress is a global threat to workers' health and the health of their organizations, which contributes, to 50% to 60% of absenteeism at work. The World Health Organisation (WHO, 2013) outlines work-related

stress as an outcome of pressures and on job demands that one is unable to cope with due to the mismatch between the tasks they are expected to do and their knowledge and abilities.

In addition to providing financial and social wellbeing, work is deemed to be good for individuals, as it enables a person to gain a sense of fulfilment. (Cox, Leka, Ivanov, & Kortum, 2004; Waddell & Burton, 2006). There are good jobs and bad jobs, with bad jobs impacting individuals in harmful ways (Leka et al., 2010). Studies have shown that there are certain work-related risks that negatively impact a person's mental and physical wellbeing which eventually present adverse effects on the overall performance of the organization and the communities that the person resides in (WHO, 2008).

In the recent decades, the work environment has transformed, due to the advent of modern technologies, globalisation, and internal organisation structural changes leading to a net effect on the working conditions of employees (Cascio, 1995). In order to survive and remain competitive, organizations are having to reposition themselves by downsizing and outsourcing some of their functions thereby adding more pressure on employees to perform at higher expectations (Landsbergis, 2003; Sparks, Faragher, & Cooper, 2001). According to Lazarus (2000), when a situation or circumstance calls for adjustments in behaviour and where the change is either good or bad, it is stressful. At the workplace, stress has far reaching consequences both at the personal and organizational level (Sonnetag & Frese, 2003).

One of the key challenges in today's work environment is adapting to constant changes in technology (Hills, 2018; Tarafdar, Tu, Ragu-Nathan, & Ragu-Nathan, 2007). A 2017 survey conducted in Australia by HR think-tank Reventure on 1005 employed adults aged between 18–75 found that 73% of workers (an increase of 27% since 2016) felt constantly connected to technology and were finding it difficult to shut off from technology. The report also found that compared to 2016, workers (66%) felt that their workplace was getting more challenging due to the increased speed of change and the complexities that come with the changes, whilst 85% of workers agreed that the way they work has significantly changed due to new and emerging technologies (Technology Decisions, 2018).

Other than technology, leadership styles of supervisors have been shown to have an impact on negative stress outcomes of workers. Authoritarian leadership style as defined by Fiedler (1967)

is a dictatorial, inflexible, and dogmatic type of management style. In some studies, this style has been shown to be strongly associated with abusive supervision (Aryee, Chen, Sun, & Debrah, 2007). Such a style has a negative effect on employees' wellbeing due to lack of autonomy on the job, where lack of autonomy is related to a variety of job strains (Spector, 1986). A study by Lindsay, Meltzer & Liu (2017) on abusive supervision and authoritarian leadership styles (sample of 232 nurses and 24 supervisors) found that there was a close relationship between abusive supervision, and stress, anxiety and depression. The study also found an association between abusive supervision and authoritarian leadership and negative physical symptoms, dissatisfaction of the job, and intention to quit their jobs.

Globally, the cost of poor mental health at the workplace is close to $2.5 trillion in lost productivity and is projected to hit the $6 trillion mark by 2030. It is therefore inevitable that mental health at the workplace would be a cause for concern and reflection today since billions of people who are employed spend a significant amount of their time at the workplace. A cross-sectional study on *Mental Disorders and Their Association with Perceived Work Stress* from data from the 2010 Canadian Community Health Survey (CCHS) found that workers who indicated that jobs were extremely stressful were three times likely to have been treated in the last 12 months (OR = 3.19) for a mental disorder compared to those who indicted that their jobs were not stressful at all. Those who indicated that they found their jobs extremely stressful were close to two and a half times likely to be diagnosed for a mood disorder (OR = 2.42) and anxiety disorder (OR = 2.35) compared to their counterparts who reported that their jobs were not stressful at all (Szeto & Dobson, 2013). Workplace anxiety has shown to be a burden to organisations and the economies of countries where in the United States alone, anxiety at the workplace costs $40 billion annually (Kessler & Greenberg, 2002). The phenomenon of workplace anxiety is understood as feelings of being nervous and fearful about one's ability to accomplish job tasks (Eysenck et al., 2007; Muschalla & Linden, 2012; Zeidner & Matthews, 2005).

The Health and Safety Executive (2020) recently released a survey on *Work Related Stress and Depression or Anxiety Statistics in Great Britain.* The findings from the Labour Force Survey (LFS) indicted that that the total number of work-related stresses, anxiety or depression added up to 828,000 in 2019/20. This is a prevalence rate of 2,400 workers per 100,000 workers and

significantly higher than the previous year. Furthermore, there was an increase of new cases of 347,000 (incidence rate of 1,202 workers per 100,000 workers). In addition, stress, depression, or anxiety was responsible for 51% of all work-related ill health cases. Some of the main factors reported that was linked to work-related stress, depression or anxiety were increase in workload pressures, tough deadlines, additional responsibilities, and lack of support from their managers. Interestingly, the survey also indicated that COVID – 19 did not appear to be the main driver of these changes.

There is a close relationship between stress and alcohol and drug abuse. Adverse situations that cause stress can lead to increased risk of drug and alcohol use as a coping mechanism to feel better (Becker, 2012; Hassanbeigi et al., 2013). Although workers take alcohol in order to cope with stress at their workplaces, alcohol has the effect of negatively impacting their efficiencies at work and in turn leading to more stress. In line with this, a study involving 140,000 European workers found that those who took larger amounts of alcohol had higher levels of workplace stress than those who abstained from alcohol (Heikkila et al., 2012). Workers in Taiwan, China showed a high prevalence to alcohol addiction where 20% of chief executives were classified as having been addicted to alcohol (Collel et al., 2014).

Contrary to these findings, Biron et al. (2011) found that 91% of workers in Israel indicated that they had not consumed alcohol a month prior to the interview, in spite of experiencing stress at their workplaces. This may be so due to the culture in Israel that has a high degree of abstinence and low per capita for consumption of alcohol. Environmental influences such as company norms, accessibility, and cultural element may have an influence on workers leaning on alcohol as a coping strategy.

Although stressful experiences can lead to certain common mental disorders such as anxiety depression and substance use (Patten, 1991), there are other determinants of it in the absence of stress. There are certain social determinants that predict the presence of mental illness according to Campion et al. (2013), who suggest that there is evidence of anxiety and depression occurring in societies with elevated levels of poverty. Literature in 115 epidemiological studies found that over 70% reported a positive association between measures in poverty and common mental illnesses (Lund et al., 2010). Another study in England, Wales and Scotland found that debt and

mental illness were correlated in spite of other adjustment variables such as demographics and income levels (Jennkins et al., 2008). Mental health also showed up in gender disparities, where women reported poorer health than men (Lehtinen et al., 2005).

Stressors during early life experiences have shown to have an effect on the neurobiological stress regulatory systems and how the way genes are expressed in relation to the stress response later on in life (Taylor, 2010). As stressors accumulate over time, it affects the overall wellbeing of individuals at the psychosocial, physiological, epigenetic and behaviour levels that eventually affects their mental health (WHO, 2014).

There is the occurrence of concurrent disorders where certain mental illnesses co-exist with one other, for example, anxiety disorders and substance use disorders prevail together at worrying rates (Stewart & Conrad, 2008). Studies have shown that compared to individuals with no anxiety disorders, those with anxiety disorders are two to three times more likely to have a diagnosis for substance use (Kushner, Kreuger, Frye & Peterson, 2008). A population survey in the US found a close association between anxiety disorders and substance use where those diagnosed with an anxiety disorder were five times more likely to use prescription drugs such as sedatives and three times nor likely to use stimulant drugs such as cocaine and amphetamines than those with no anxiety disorder (Reiger et al., 1990). According to self-medication theory, people with anxiety disorders who also suffer from substance use disorder are more likely to misuse prescription drugs such as sedatives. This is in line with the theory that anxious individuals will lean on drugs (including alcohol) and self-medicate to feel calmer. Conversely, another theory suggests that substance use leads to individuals developing anxiety disorders (Stewart, 1996). When drugs with stimulating effects such as cocaine are used, it can potentially trigger anxiety disorders (Kushner, Abrams & Borchardt, 2000). Attempting to withdraw from these drugs can further exacerbate the situation for it has the potential to worsen the anxiety, leading to an anxiety disorder (Schuckit & Hesselbrock, 1994). Researchers have attempted to identify which disorder appeared first in people affected by both, anxiety disorders and substance use disorders and it was concluded that in three quarters of individuals who have both diagnosis, anxiety disorder was the precursor (Kushner et al., 2008).

Another explanation for the significant overlap between anxiety disorders and substance use disorders is the possible vulnerability to the two conditions, a personality trait that disposes certain individuals (Stewart & Conrod, 2008b). Furthermore, Tambs, Harris and Magnus (1997) suggest that studies on twins has shown some evidence of genetic predisposition on the co-occurrence of anxiety and alcohol use

A Canadian survey found concurrent disorders where individuals who had been diagnosed for major depressive disorder with a 12-month span also reported using alcohol (12.3% compared to the general population at 7%) and alcohol dependence diagnosis (5.8% compared to the general population at 2.6%) and drug dependence (3.2% compared to the general population at 0.8%). Individuals with substance use disorders with the span of a 12-month period also reported to have concurrent major depressive diagnosis (8.8% among individuals who have an alcohol dependent diagnosis and 16.1% in those dependent on other drugs compared to 4.0% in the general population) according to Adlaf et al. (2005) and Gravel & Beland (2005).

The taskforce on mental health in Kenya (Mental Health and Wellbeing: Towards Happiness and National Prosperity, 2020) found that at some point, one in five Kenyans will suffer from a mental illness in their lifetime. Furthermore, mental illness is a cost to the country where it was responsible for 13% of the total disease burden and at the same time, budget allocation for mental health was less than 0.1%. When the taskforce went on the ground, Kenyans responded that apart from not having sufficient information on signs and symptoms of mental illness, and not knowing the difference between mental health and mental illness, they were exposed to high levels of stress where one group cited stress due to lack of employment, and another group citing that stress at the workplace, where their managers were responsible for their stressors.

The aim of this research was to create awareness of workplace stress and its associated factors of depression, anxiety, and substance use in organisations in Kenya. The reason for choosing human resources directors, managers, and assistant managers as a sample population was to create awareness of this significant issue at policy level in their organisations. According to STATISTA (2020), three million Kenyans are formally employed where the average household size is 4.0 individuals (Geoportal, 2019). By engaging organisations on mental health issues such as stress and anxiety, depression, and substance use for instance, there is the possibility of

reaching out to 12 million Kenyans to create awareness, and one of the steps towards achieving the Kenya vision 2030 goals that the Kenya Mental Health Policy 2015 2030 subscribes to.

Methodology

The study was an analytical cross-sectional study where purposive sampling technique was used. This study was conducted in the Nairobi Metropolitan area, which consisted of Nairobi County, Kiambu County, Kajiado County, Machakos County and Muranga County. It was chosen by virtue of Nairobi Metropolitan having a significant presence of public and private sector organisations. The study population comprised of human resources professionals who held the positions of director, manager, assistant manager, and supervisor.

Using Fisher's formula (Bernard & Ryan 2010), a minimum of 271 sample size was taken into consideration. A survey which included a demographic questionnaire, the Cohen Perceived Stress Scale (CPSS) for stress, Beck's Anxiety Inventory (BAI) for anxiety, Beck Depression Inventory-II (BDI-II) for depression and the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) was created on a Google form into a link, from the Google Docs platform. The link was sent to human resources directors, managers, assistant managers, and supervisors via email and to their inbox on the social media platform LinkedIn. Data was collected from 201 participants from a population sample size of 271 individuals.

To determine the association between work-related stress and anxiety, depression, and substance use, descriptive statistics and bivariate analysis was conducted to determine associations between perceived stress and mental health outcomes. The association between perceived stress scores and depression scores, anxiety scores and substances use scores were assessed using Pearson's correlation. Multivariate logistic regression was used to determine independent factors of stress.

Results

The respondents were 62% female and 37% male while 1% preferred not to reveal their gender. Among all respondents, 57% were married, 30% single, 5% separated, 3% divorced, 2% cohabiting and 1% widowed. Managers made the highest percentage of respondents with 55% followed by assistant managers with 24% and directors with 15% and finally supervisors made

up 6% of the respondents. Among all respondents, 43% earned more than 200,000 Kenya shillings, 28% earned between 100,000 – 200,000 Kenya shillings, 18% earned between 50,000 and 100,000 while only 9% earned below 50,000 Kenya shillings at the time of the study. In terms of education level, the majority had bachelor's degrees and master's degrees with combined percentage of 86%, followed by diploma holders with 11% while certificate holders and PhD holders only were only 1% and 3% respectively. Majority of the respondents worked in the private sector, followed by the public sector and finally the NGOs with 70%, 17% and 11% respectively. According to age categories, 53% belonged to the Gen-Xers category which are aged between 40 and 50 years old, followed by Millennials at 39% aged between 25 and 39 years old and finally 7% made up Baby Boomers aged between 55 and 66 years old.

Prevalence of anxiety, depression, and substance use

The study sought to examine the prevalence of anxiety, depression, and substance use at the workplace. A granular analysis of anxiety, depression, and substance use is illustrated in Table 1.

Table 1: Frequencies and Percentages of Respondents with Different Levels of Anxiety and Depression

Variable	Category	Frequency	Percent
Anxiety	Minimal	92	45.8
	Mild	43	21.4
	Moderate	51	25.4
	Severe	15	7.5
Depression	Minimal range	89	44.3
	mild mood disturbance	34	16.9
	borderline clinical depression	30	14.9
	moderate depression	28	13.9
	severe depression	17	8.5
	extreme depression	3	1.5
Alcohol	No	172	85.6
	Yes	29	14.4
Tobacco	No	81	40.3
	Yes	120	59.7
Cannabis	No	178	88.6
	Yes	22	10.9
Cocaine	No	192	95.5
	Yes	9	4.5
Amphetamine	No	195	97.0
	Yes	6	3.0
Inhalants	No	200	99.5
	Yes	1	0.5
Sedatives	No	176	87.6
	Yes	25	12.4
Hallucinogens	No	199	99.0
	Yes	2	1.0
Opioids	No	200	99.5
	Yes	1	0.5

According to the Beck Anxiety (BAI) that was administered to respondents, table 1 shows that 45.8% had minimal anxiety, 21% had mild anxiety, 25% had moderate anxiety, while only 8% of respondents indicated severe anxiety levels. Further classification on the prevalence of anxiety indicated that 54% of the respondents were anxious while 46% were not anxious or were normal.

According to the Beck Depression Index II (BDI-II), 44% of respondents showed minimal depression levels, 16% reported mild mood disturbance, 14% recorded borderline clinical depression, 13% had moderate depression, 8% reported severe depression and 2% indicated

extreme depression. Based on the findings, 8.8% of respondents were found to be depressed while 61.2% were not depressed.

On the different substances used over the lifetime of the respondents, tobacco was used by the highest number of all respondents at 60% of the total sample. All the other substances had the highest number of people who had not used other substances.

Correlation between stress scores and anxiety, depression, and substance use

The study further wanted to ascertain the association between workplace stress, anxiety, depression, and substance use. The results of the correlation between stress scores and anxiety, depression and substance use are illustrated in Table 2.

Table 2: Correlations Between Stress and Anxiety, Depression, and Substance Use Scores (N=201)

	BAI	BDI	Alcohol score	Sedative's score
CPSS	.584**	.578**	.178*	.157*
BAI		.655**	.215**	.273**
BDI			.261**	.266**
Alcohol score				.362**
Sedative's score				1

*Note: ** Correlation is significant at the 0.01 level (2-tailed).*
** Correlation is significant at the 0.05 level (2-tailed).*

A significant linear relationship was established between stress scores and depression, anxiety, alcohol, and sedatives scores. Table 2 shows that stress scores were strongly positively correlated to anxiety score, $r(199) = .584$, $p < .001$, followed by depression scores, $r(199) = .578$, $p < .001$, followed by alcohol use, $r(199) = .178$, $p < .001$ and lastly least positively correlates with sedatives, $r(199) = .157$, $p < .001$.

These findings also indicate that stress explains 34% variability in correlation to anxiety ($r^2 = .341$), stress accounts for 33% of variability in depression ($r^2 = .334$). Anxiety and depression therefore together account for 67% variability in stress. Alcohol correlates to 3% of variability ($r^2 = .032$) while sedatives account for 2% ($r^2 = .025$) of variability in stress only, both of these accounting for 5% among all substances. The rest of the variability between other substances use and stress is unexplained or residual.

Multivariate logistic regression was used to determine independent factors of stress. The variables from bivariate analysis on anxiety scores, depression scores and alcohol scores and sedative scores were included into the binary logistic regression because they were statistically significant. The output of the binary logistic regression is presented in Table 3.

Table 3: Logistic Regression Output Between Stressed and Normal Respondents

Variables	B	S.E.	Wald	Df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
BAI	0.047	0.057	0.686	1	0.408	1.048	0.938	1.172
BDI	0.192	0.068	7.889	1	0.005	1.212	1.06	1.385
Alcohol score	0.058	0.077	0.584	1	0.445	1.06	0.913	1.232
Sedative score	0.06	0.153	0.153	1	0.695	1.062	0.787	1.433
Constant	1.779	1.439	1.528	1	0.216	5.925		

Table 3 illustrates that the anxiety score was positive but insignificant (p=.408) correlate of the stress levels in the sample participants. The odds ratio indicates that for every one-unit increase in anxiety, the likelihood of having stress increases by a factor of 1.048. The depression scores were positive and significant (b= .192, se=.068, p=.005) correlate of the stress levels in participants of the current study. The likelihood of having stress increases by a factor of 1.212 whenever depression is increased by one unit. Alcohol use (p=.445) and sedatives use scores (p=.695) are positive but insignificant correlates of the sample participants' stress. For every one-unit increase in the use of alcohol, the likelihood of having stress increases by a factor of 1.06 and for every one-unit increase in the use of sedatives the likelihood of having stress increases by a factor of 1.062.

Discussion

The current study on the prevalence and association between work – related stress and anxiety, depression and substance use among human resources directors, managers, assistant managers and supervisors in various sectors in Nairobi Metropolitan Kenya suggests that there is an association between workplace stress and anxiety r (199) = .584, p < .001, depression r (199) =.578, p < .001, alcohol r (199) = .178, p < .001 and sedatives r (199) = .157, p < .001. The output of the binary logistic regression analysis found that depression scores were positive and significant (b= .192, se=.068, p=.005) correlates of the stress levels in participants of the current study.

In line with these findings, a descriptive and analytical study by Poursadeghiyan et al. (2016) on the *Relationship Between Job Stress and Anxiety, Depression and Job Satisfaction in Nurses in Iran*, found that 18.8% of nurses were fairly depressed and 31.2% showed medium to severe anxiety. Similarly, another study on *The Relationship between Work-Stress, Psychological Stress and Staff Health and Work Outcomes in Office Workers* found that work-stress predicted psychological stress, R2 adjusted = .42, $F(3, 197) = 50.10$, $p < .001$; anxiety, R2 adjusted = .29, $F(3, 197) = 27.64$, $p < .001$; and fatigue, R2 adjusted = .08, $F(3, 197) = 6.96$, $p < .001$; and work-stress and perceived Organisation Support (POS) both predicted depression, R2 adjusted = .26, $F(3, 197) = 24.49$, $p < .001$ (Thorsteinsson, Brown & Richards 2014).

Wang (2006) found that on a brief survey on work stress, participants who scored high on stress also had a one-month prevalence of mood or anxiety disorder of 6.8% compared to only 1.8% of those who had low stress scores on the questionnaire. In addition, Wang (2005) in a Canadian sample found that the odds ratio for those scoring high in the 75th percentile and above of the stress survey was elevated at 2.35 for developing a major depressive episode compared to those below the 75th cut off.

Additionally, Melchior et al. (2007) in a study on 1037 participants who were born between 1972 and 1973 of the Dunedin Multidisciplinary Health and Development study, found an association between workplace stress, anxiety, and depression. The study found that a graded relationship existed between job demands that are psychological in nature and the risk of anxiety and depression. Additionally, the study found that where job demands were high, participants experienced twice the risk of anxiety and depression compared to those who experienced low demands on the job.

Similarly, a study by Tennant (2001) also showed that psychological disorders, especially depression are most likely to be caused by work related stressors because employees are usually faced with greater demands at work and lesser job security, which are likely to be stressful to them. The study on potential moderators of stress on 203 women health professionals from the Kuala Lumpur Hospital found that there was a link between work pressure and symptoms of depression such as low drive, low personal influence moderate control, and high impatience behaviour.

Consistent with the findings of the current study, a literature review study by Fernandes and Donato (2017) from data bases of the Virtual Health Library and PubMed found that in general, professionals in diverse sectors may see alcohol or drugs as easily accessible in order to cope with the demands of the job. Of the 13,005 workers who were interviewed in Spain, 5% of men and 2.3%b of females were categorised as heavy drinkers. Both men (19.5%) and women (8%) reported that they binge drank to cope with stressors at work. Risky alcohol and substance use are high among people with psychological difficulties such as anxiety, high stress, work fatigue and low emotional intelligence, and people who suffer from mental distress. This is because alcohol use in an interaction between the alcohol, the person using the alcohol and their surroundings. Alcohol and other substance use tend to be a coping mechanism to numb the emotions associated with stress (Obeid et al., 2020; Volkow, Freund, & Dowling, 2019).

Accordingly, health care professionals, due to their stressful work environment, are vulnerable to developing alcohol – related disorders. In s study on 131 emergency paramedics in South Africa, 24% said that they abused alcohol and of 2,092 doctors studied in Germany, 23% reported that they drank alcohol every day, 18.9 % of whom had alcohol-related disorders (Unrath, et al., 2012; Fjeldhelm et al., (2014).

There were certain limitations to the study. The Cohen Perceived Stress Scale (CPSS), The Beck Anxiety Inventory (BAI) and the Beck Depression Inventory II (BDI II) were self-reported assessments and although they are widely used in clinical settings and research, they can be prone to bias. Furthermore, they can also be dependent on the person's psychological state at that time of responding to the survey.

The current research was undertaken during a global pandemic (COVID – 19) and therefore some of the results of the study may have been impacted by this phenomenon. According to WHO (2020b), COVID – 19 is an infectious disease which was discovered in December 2019 in Wuhan China caused by the coronavirus that was transmitted between animals and humans. The disease has spread fast globally, and as of July 2021, it has claimed 4,100,000 lives and infected 191,000,000 individuals globally. At the same time, In Kenya, COVID -19 has claimed 3,800 lives and infected 194,000 individuals (https://github.com/CSSEGISandData/COVID-19). According to Kniffin et al., (2020), widespread challenges are taking shape as employers and

employees adapt to this pandemic. Overnight, people are forced to work from home, employees are either being furloughed or retrenched. As a result, organisations have no choice but to fundamentally change to adapt whilst at the same time, opportunities have arisen for certain industries as so happens in times of natural disasters and wars (Sine & David, 2003). Kniffin et al. (2020) suggest that there is evidence that for many employees' conditions at work has deteriorated and with COVID-19, this may have been magnified as employees are at greater risk of job burnout – a chronic stress symptom.

Conclusion

The purpose of this study was to examine the prevalence and association between work-place stress and anxiety, depression, and substance use. The findings from this study support the notion that there is an association between workplace stress and anxiety, depression, and substance use. Furthermore, previous studies highlighted in this paper have shown that the impact of workplace stress is translated into the success or failure of organisations where elevated levels of stress can be detrimental to the productivity of the employee that in turn is a cost to the organisation. In addition, studies have found that the burden of stress at the workplace is a cost to mental health and other health facilities and governments at large. To mitigate the prevalence of stress at the workplace and to assist employees to deal with the pressures at work so that they are better able to cope, both, organisations and psychologists can play a significant role.

Clinicians therefore have a critical role to play in workplace stress. Although stress management training programmes are commonly used as interventions in organisations where relaxation techniques and assertive training etc. are being promoted, they exclude the aspect of clinical modalities such as cognitive appraisal as part of cognitive behaviour therapy. Ivancevich et al. (1990) found that by altering how one appraises a potentially stressful situation, it has an impact on enabling individuals to cope more effectively with stress. It is therefore recommended that a multi modal partnership between, the organisation, employees, and clinicians exist in order to provide effective solutions to manage stress at the workplace.

The current study contributes to and is in line with the research on the prevalence and association between workplace stress and anxiety, depression, and substance use in a number of ways. First, it will add value to mental health research in Kenya and especially to organisations in Kenya

who will have interesting data to lean on when advocating for better mental health for their employees. Second, it weighs in on the critical issue of stress at the workplace and the fallout from it on many fronts especially its impact on employees' mental wellbeing. Together with this, the impact of it on the disease burden and the eventual loss of productivity on organisations and countries cannot be ignored. Third, it will add value to clinicians who work within organisations or externally to explore the construct of workplace stress in order to get better outcomes for their clients.

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