

Managing Substance Abuse on Construction Sites in Jos, Nigeria

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ABSTRACT

Substance abuse is a major problem particularly in the construction industry, owing to the strenuous nature of construction work. This study appraises the management of substance abuse with the view to develop strategies for addressing the menace among workers on construction sites in Jos. Questionnaire was used to obtain the data for the study. Mean Score was used in analysing the data. The study revealed that workers engage in drug abuse on site in order to increase their strength and decrease workplace induced stress. Common signs of workplace substance abuse were falling asleep at work often/appearing to be very tired at all times and prone to making mistakes at work. The main effects of substance abuse on the workers' performance were impairment of employee's judgment and high rate of accidents. The study revealed that the most effective strategies for combating substance abuse among workers on construction sites were providing trainings to workers on helping with workplace addiction issues and support system-counseling for first time offence.

Keywords: Managing, substance, abuse, construction sites, Nigeria.

1. INTRODUCTION

Substance abuse is fast becoming an issue of national concern in Nigeria. About 15% (14.3 million) of the adult population in Nigeria use psychoactive drug substances which is higher than the 2016 global average of 5.6% among adults (Kazeem, 2019). This incidence of drug and substance abuse is high in the construction industry because works on construction sites are termed hazardous and many workers resort to the use of drugs as stimulants to meet up with work demand on sites (Bamgbade, Amos, Okosun and Akanbi, 2018). This situation is more prevalent in city centres such as Jos, where major construction projects are being executed on regular basis. For instance, on the outskirts of Jos, several construction projects are springing up and a cursory survey on such sites revealed an increase on substance abuse among construction workers.

Substance abuse can be defined as a pattern of harmful use of substances such as alcohol and other drugs for mood-altering purposes (McLellan, 2017). Construction workers use intoxicating substances not only for recreation but also to cope with the strenuous nature of construction work (Bowen, Edwards & Lingard, 2014). Workers involved in heavy-duty and high-risk areas such as masonry-section and concreting section are mostly prone to fatigue and stress. In order to reduce build-up of stress, these classes of operatives often use drugs prescribed by health care professionals and other non-prescribed psychoactive drugs. However, most of these drugs being addictive substance can be dangerous; if overused, they can lead to withdrawal symptoms making it difficult to quit. Consequently, the use of substances and other related drugs among construction workers in Nigeria is on the rise and poses a serious challenge among site managers because a strong relationship exists between substance abuse and workers' productivity.

The abuse of substance at workplace such as construction sites can lead to lower productivity through absenteeism, feeling dizzy and sick at work, lateness to work or leaving

early, having problems with job tasks, physical injuries and damage to co-worker and customer relations (Armstrong, 2014). Abuse of substances on construction sites can also lead to aggravated assault and sexual battery charges; those under the influence of substances would break site rules, and the quality of workmanship and productivity would be directly affected. A clear correlation has been established between substance abuse and rates of absenteeism on construction sites; in addition, higher accident rates and other safety issues on construction site have also been directly attributable to alcohol and substance abuse (Joseph, Saheed & Adekunle, 2019). Other impacts of substance abuse include mental health problems such as depression, developmental lags, apathy, withdrawal, conduct problems, personality disorders, suicidal thoughts, attempted suicide and other psychosocial dysfunctions (Kamlesh & Soma, 2016). The effect of substance abuse goes beyond individual consumers to co-workers on site, family members, immediate environment, the construction company, the industry as well as the national economy. There is therefore the need to prevent the abuse of substances and to mitigate its impacts on construction sites in order to improve productivity among workers.

Despite the dangers associated with the abuse of substances and related drugs, efforts over time to mitigate the problem especially in the construction industry have not been adequate. The construction industry in Nigeria is still without known effective measure for preventative substance abuse. There are no known tailor-made substance abuse mitigation strategies which suggest the need to develop modalities towards addressing the menace in the construction industry. In addition, there are no ready statistics on the problem in the Nigerian construction industry; hence the need for this research. It is against this backdrop that this research investigates the adequacy, efficiency and effectiveness of strategies employed by the site managers in the prevention and mitigation of substance abuse on construction sites in Jos, Nigeria. The study therefore seeks to provide answers to the following questions: What are the motives for substance abuse among operatives on construction sites in Jos, Nigeria? What are the effects of substances abuse on construction workers in Jos, Nigeria? How can substance abuse among operatives on construction sites in Jos, be effectively prevented and mitigated? This research therefore aimed at developing strategies for effective management of substance abuse with the view to improving the health of construction workers and productivity on construction sites in Jos.

1. LITERATURE REVIEW

1.1 Substance Abuse on Construction Sites in Nigeria

Substance Abuse is defined as the use of a substance which is not consistent with legal or medical guidelines (World Health Organisation [WHO], 2006). It refers to the harmful or hazardous use of psychoactive substances, including alcohol and illicit drugs. These illicit drugs directly activate the reward system mechanism in the brain instead of achieving it through adaptive behaviors. Individuals with lower levels of self-control, which may reflect impairments of brain inhibitory mechanisms, may be particularly predisposed to develop substance use disorders, suggesting that the roots of substance use disorders for some persons can be seen in behaviors long before the onset of actual substance use itself (Sajad, 2017).

Illicit drugs and alcohol have been used as a medium for change in mood and perception by human being since early ages. Construction workplace is among the most susceptible and vulnerable workplace to illicit drug use and alcohol abuse (Kikwasi, 2015). The construction industry has consistently and statistically significantly ranked very high for illicit drug and alcohol use when compared to other industries. It was observed that construction stood out among 21 major occupational groups ordered from highest to lowest in percentage of full-time workers in terms of use of illicit drugs (Larson, Eyerman, Foster & Foster 2007). In a study on substance abuse by industry, construction was ranked 2nd with 14.3% behind accommodations and food services leading the chart with 16.9%. Arts, entertainment and recreation industry

was rated 3rd (12.9%), while mining (11.8%) and utilities (11.5%) came 4th and 5th respectively (Kollaer, 2017).

Alcohol and drug abuse is associated with low productivity at the workplace (Nicholas and Mayho, 2016). According to the World Health Organisations, alcohol causes 1.8 million deaths (3.2% of total) one third (600,000) of which result from unintentional injuries; moreover, it causes a loss of 58.3 million of Disability-Adjusted Life Years (DALY) of which 40% are due to neuro-psychiatric conditions (WHO, 2011). Alcohol contributes to ramifications at the workplace such as loss of workplace productivity through absenteeism, feeling sick at work, lateness or leaving early, accidents, having problems with job tasks, and damage to co-worker and customer relations (Armstrong, 2014). These lead to organisational constraints like high staff turnover and subsequent recruitment, consumption of health benefits in case of illness or accidents that would result in compensation.

Substance abuse has been related to negative occurrences in the workplace such as stress, monotonous work, shift work, work requiring relocation and the frequent changes in co-workers and supervisors (International Labour Organisation [ILO], 2010). Studies indicate that substance abusers are two to four times as likely to have an accident as people who do not use drugs and alcohol, and abuse can be linked to approximately 40 percent of industrial fatalities (Armstrong, 2014). A study by ILO (2010) on the abuse of alcohol and drugs in the workplace found that absenteeism of employees with alcohol and drug problems was three times higher than for other employees; employees with chemical dependence problems claimed sick benefits three times more than other employees and made compensation claims five times more than other employees; 20% to 25% of injuries in the workplace involved employees under the influence of alcohol; and drugs and alcohol consumption accounted for 15% to 30% of all accidents at work.

In a small sample of alcoholics, it was found that within 10 years of treatment, approximately 10% of alcoholics were dead prior to 60 years of age (WHO, 2011). Thus, some drugs lead to notable mortality-related cost (productive years lost as employee or parent). Various costs of alcohol and other drug abuse are difficult to explain in financial terms (National Campaign Against Drug Abuse [NACADA], 2011). Evidently, in conjunction with financial costs, there are the emotional costs of alcohol and other drug abuse to family members, significant others, and the users themselves, and the enduring burden of these costs is difficult to assess (Armstrong, 2014). Alcohol and drug abuse not only affects the individual concerned, but also endangers the circle of people surrounding the abuser and has the potential to destroy the person's career and relationships. Clearly this reveals that substance abuse should not be seen as only affecting heavy users as incidents can result from the consumption of low quantities of alcohol as well. Thus, it becomes important for employers to implement preventative measures and management programs rather than just concentrating on the identification and rehabilitation of heavy users.

1.2 Strategies for Substance Abuse Management on Construction Sites

The workplace can play an important role in preventing and providing remedies for substance abusers. Workplace substance abuse prevention is designed to assist workplaces effectively deal with alcohol and drug abuse as a matter of health, safety, and performance. The International Labour Organisation has codes/rules of conduct on the management of alcohol and drug related issues in the workplace. These ILO codes of practice presents a variety of multidisciplinary approaches to the prevention, treatment and rehabilitation of alcohol- and drug-related problems in the workplace (ILO, 2023). These rules can serve as guidelines for employers wishing to implement appropriate measures to prevent, reduce and control alcohol and drug related problems in the workplace. Restricting workers' access to alcohol reduces their drinking. The cultural prohibition against alcohol in the Middle East, making alcohol less available, explains the reduction in drinking among U.S. military personnel serving in Operations Desert Shield and Desert Storm (WHO, 2011). The employer should, after

consultation with employee representatives, consider withdrawing alcohol as an item for expense account reimbursement or restrict it to specific situations. Employers should also be prevented from paying any wages in the form of alcohol or drugs. The above should apply to both management and workers. In those instances, where medication might result in significant impairment, the employee should consult a health professional and inform his/her senior in accordance with normal procedures for absence for health reasons.

Employers should promote safety and health in the workplace through information, education and training programmes on the physical and psychological effects of alcohol and drug use (Armstrong, 2014). The information, education and training programmes should include the general and specifics to the workplace laws and regulations on alcohol and drugs, suggested steps to prevent such problems from occurring, and services available to assist the employees both within and outside the workplace. These will include information on assessment and referral services, counseling, treatment and rehabilitation. The training will also equip managers with the necessary skills to respond to questions regarding the organisation policy on alcohol and drugs.

Training should also be provided to employee representatives in order to enable them to assist employees who require help and to identify working methods or conditions that need to be changed or improved to prevent, reduce or better the management of alcohol and drug related problems (Arthur, 2012). Identification of employees with substance use disorder could be conducted at different levels, including, self-assessment, and informal identification through a friend, family member or fellow employee and formal identification. Formal identification may include testing and should be done in accordance with the applicable laws and practices.

Addicted workers who seek rehabilitation should not be discriminated against and should enjoy the normal benefits that are offered by an employer including the opportunity for transfer and promotion. Additionally, employers should be aware that an employee who suffers from substance use disorder might also be suffering from a health problem and should consider offering counseling, treatment or rehabilitation as an alternative before deciding to discipline the employee (WHO, 2011). Disciplinary rules regarding substance abuse should be communicated to employees so that they are clear in terms of what is prohibited and the type of sanctions for the violation of such rules.

Patients must be able to develop the skills necessary to be aware of what has led to the use of a substance and to identify the warning signs heralding a potential relapse. Once aware, the patient must then learn new, more effective ways of coping which allow a choice not to use the substance. Cognitive behavioural therapy is directed at identifying and modifying maladaptive beliefs that cause discomfort and dysfunctional behaviours. The purpose when dealing with addictive behaviours is to help the client identify and avoid stimuli which promotes the use of the substance, find the means to cope with those stimuli when they cannot be avoided, and to recognize the difference between those situations where coping skills are effective and where avoiding the situation is necessary (Armstrong, 2014).

2. METHODOLOGY

3.1 The Study Area

Jos is a city in the Middle Belt of Nigeria, located at latitudes 9°45'00"N to 09°57'00"N and longitudes 8°48'00"E to 8°58'00"E (Akintunde, Adzandeh and Fabiyi, 2016). Jos city is located on the Jos Plateau, at about 1,238 metres or 4,062 feet above sea level. It has a population of about 900,000 residents based on the 2006 census. Jos City is the administrative capital and largest city of Plateau State. The city housed three (3) local government areas namely: Jos north, Jos south and Jos east. The city proper lies between Jos north and Jos south. Jos north is the state capital and the area where most commercial activities of the state take place, although due to the recent communal clashes a lot of commercial activities are shifting

to Jos south. Due to incessant ethno-religious crisis, people prefer to relocate to areas where they have religious advantages. Consequently, the fringes of the city are littered with construction activities both residential and commercial as people try to resettle to safety areas. The incidences of substance abuse are being observed on these construction sites which informed the need for this study with the view to adequately prevent and mitigate the menace for effective project management and delivery within the city and environs.

3.2. Study Population and Sample

This study focused on managing substance abuse on construction sites in Jos, Nigeria. The population of the study consisted of skilled and unskilled workers in the construction sites and management staff. There are several construction sites in Jos as at the time of this study; the total construction sites could not be determined due to absence of valid register. Similarly, there are no available formal records of all construction workers on those sites and there are casual staff on daily pay who move from one construction site to another depending on where their services are needed. Consequently, determining the total population of workers on sites for the purpose of selecting the study sample becomes extremely difficult. In determining a study sample from unknown population where the data is quantitative in nature, Cochran (1953) had suggested the use of the formula below:

$$n = \frac{Z^2 \times p(q)}{e^2}$$

Where:

n = Sample size

e = Acceptable margin of error

Z = Confidence level obtained from the Z score

P = Probability of success (number expected to be returned)

q = 1-p Probability of failure (expected number of unretrieved instrument)

For this study, the following parameters were used at confidence level of 90%

$$p = 0.6$$

$$q = 1 - 0.6 = 0.4$$

$$z = 1.645 \text{ (confidence level of 90\%)}$$

$$e = 10$$

$$\text{This implies that: } n = \frac{(1.645)^2 (0.6)(0.4)}{(0.1)^2} = \frac{(2.706025) \times (0.24)}{0.01} = 64 \text{ respondents,}$$

For availability of site workers on regular basis, only construction sites having 10 workers and above were considered for the study. Sixteen (16) construction sites were conveniently selected; 4 respondents consisting of 2 each of skilled and unskilled workers.

3.3 Methods of Data Collection and Analysis

The instrument of data collection used was structured questionnaire. It is a fast, efficient and inexpensive means of data collection in survey studies (Market Research, 2022). Questionnaire was used to obtain information on motives for substance abuse among workers, effects of substances abuse on workers performance and strategies for preventing and mitigating substance abuse on construction sites. Based on the sample size, 64 questionnaires were administered out of which 55(86%) were retrieved and used for this study. Purposive sampling technique was use to select the sample. In this technique, the researcher select those considered to have adequate knowledge of the subject and whose judgment would be useful in achieving the purpose of the study. In this study, the respondents were those with the requisite experience in construction work and/or management of construction.

Mean rating was employed to analyse the data obtained and charts were used for illustration for clarity and ease of understanding. The technique uses the numerical values assigned to factors or propositions to calculate their mean scores by all the respondents of the survey. In this study, mean scores was used to determine the factors that motivate workers to engage in drugs, the major impact of drug abuse on workers' performance on construction site and the most effective and efficient strategies for mitigating and preventing substance abuse on construction sites.

3. RESULTS AND DISCUSSION

3.1 Demographic Data of Respondents

The study set to look at different demographic characteristics of respondents who participated in the study based on their age, level of education, position on the construction site and work experience and the result as presented in Table 1. The findings indicated that 40% of the respondents were aged between 15-25years, 43.6% were between 26-35years, 11.0% were aged between 36-45years, and 5.4% were aged 45years and above. This implies that majority of the employees were aged above 26. Studies have shown that drug abuse among youths is high and with this youthful population, it is a pointer to high intake of drugs within the study area which underscores the need for this research.

In terms of level of education, the results indicated that 36.4% of the respondents were diploma holders, 29.0% had technical certificates, 27.3% had Bachelor's degrees, 5.5% had Master's degrees and 1.8% had Ph.D. The results also indicated that 43.7% of respondents had been on construction sites for between 1-5years, 23.6% had between 6-10years of experience, 12.7% have had above 20years experience on sites; 10.9% had been on sites for between 11-15years and 9.1% had between 16-20years experience (Table 1). Regarding educational qualifications and practical experience in construction, the respondents had the requisite qualifications and site exposure to supply valid information on site vices such substance abuse among workers on construction sites.

Table 1: Demographic Information of Respondents

Item	Frequency	Percentage
Age		
15 -25	22	40.0
26 – 35	24	43.6
36 – 45	06	11.0
46 -55	02	03.6
> 55	01	01.8
Total	55	100
Educational Qualification		
Technical Certificates	16	29.0
Diploma/NCE	20	36.4
Bachelor Degree	15	27.3
M. Sc/M.Tech	03	05.5
Ph.D	01	01.8
Total	55	100
Position on Site		
Labour	21	38.0
Operator	10	18.2
Project Manager	09	16.6
Mason	15	27.2
Total	55	100
Years of Experience		
01-05	24	43.7
06-10	13	23.6
11-15	06	10.9
16-20	05	09.1
>20	07	12.7
Total	55	100

3.2 Motives of Substance Abuse among Workers on Construction Sites

The motives of substance abuse on construction sites in Jos were investigated and the result is presented in Table 2. The result indicated that the four motivating factors that received the highest ratings were to increase strength (4.41), followed by the need to enhance job performance (4.23), to improve self-confidence (4.15) and to increase output (3.83). This therefore showed that the common reasons workers on construction sites in Jos use drugs and other substances were to increase strength, enhance job performance, improve self-confidence and increase output. However, to suppress appetite (3.39), reduce anxiety and tension (3.36), induce feeling of pleasure (3.00) and induce skeletal muscle relaxation (2.98) were ranked the least motives.

There are several factors that motivate construction workers to abuse substances on sites which are either related to the work environment or the nature of the project work. Construction project is labour intensive; in some cases it involves the use of heavy duty equipment which requires a lot of energy. Construction workers therefore use drugs to boost their energy level and to sustain them for the longer hours they spent at work. In addition, many workers are engaged on casual basis placed on daily payment based on their performance. Consequently, some workers take drugs and other substances to enhance their performance to increase their output for better pay. A study had earlier reported that workers engage in drugs to increase their physical performance (Yunusa, Bello, Idris, Haddad and Adamu, 2017). Closely linked to these is the need to be at alert and remain active for optimal performance. Reducing anxiety and tension, deriving pleasure and desire to sleep could have been rated low in this study; however elsewhere they have been rated as the main reasons for substance abuse at workplace (Dankani, 2012; Namadi, 2016). Project managers therefore need to be vigilant and should ensure workers are not given the slightest opportunity to engage in drugs by creating a serene working environment.

Table 2: Motives of substance abuse among workers on Construction Site

Motives	Mean	SD	Rank
Increase strength	4.41	1.80	1 st
Enhance job performance	4.23	1.31	2 nd
Boost self confidence	4.15	0.10	3 rd
Increase output	3.83	1.06	4 th
Increase alertness	3.81	1.16	5 th
Reduce workplace induced stress	3.75	1.11	6 th
Decrease time required to complete a given task	3.60	1.12	7 th
Increase ability to concentrate on a given task	3.41	1.24	7 th
Suppress appetite	3.39	1.23	9 th
Reduce anxiety and tension	3.36	1.08	10 th
Induce feeling of pleasure	3.00	1.21	11 th
Induce skeletal muscle relaxation	2.98	1.47	12 th

3.3 Common Signs of Substance Abuse on Construction Sites

Identifying the early signs of substance abuse would help in mitigating its impact on construction sites. Consequently, the signs of substance abuse on construction sites were investigated and the result is shown in Table 3. Falling asleep at work often/appearing to be very tired at all times was rated first (4.21), prone to making mistakes at work came second (4.15), frequent trips to bathroom, back alley or other places where drugs might be used was rated third (4.01) while displaying extreme mood swings on sites came fourth (3.90). The least ranked signs were needless risk taking behaviours (2.78), reduced attention at work (2.77), carelessness towards safety (2.75) and fidgetiness (restlessness) (2.65)

Substance abuse manifests in various ways with different signs and symptoms among workers on construction sites. Illicit drugs impair workers' mental, emotional and physical state thereby making them dizzy and sleepy on site; drug takers often appear tired and weak. Due to

vision impairment owing to the influence of drugs, workers are prone to mistakes on sites as they are often unable to follow instructions. These findings confirmed the report of Nova Recovery Center (2018) that the most common signs of substance abuse at workplace are falling asleep at work often and frequently making mistakes. Furthermore, substance abuse is addictive in nature; in order to satisfy their cravings, workers would frequently excuse themselves to visit hidden places such as bathrooms and other blind corners to take drugs. Drugs are known to have psychological impacts on human brain which alters the mood of the consumers leading to sudden mood swings. Consequently, workers' behaviours become unpredictable and spark quarrel at work at any slightest chance. Once these signs begin to manifest on sites, it is imperative for project managers to act swiftly before the performance of the workers is greatly affected.

Table 3: Common Signs of Substance Abuse on Construction Site

Common signs	Mean	SD	Rank
Falling asleep at work often/Appearing to be very tired at all times	4.21	1.10	1 st
Prone to making mistakes at work	4.15	1.32	2 nd
Frequent trips to bathroom, back alley or other places where drugs might be used	4.01	1.12	3 rd
Displaying extreme mood swings on site	3.90	1.06	4 th
Being tardy or absent frequently without notification	3.81	0.18	5 th
Disappearing valuable company property	3.75	1.19	6 th
Missing appointments or deadlines at workplace	3.67	1.32	7 th
Taking unusual long time to complete easy/common tasks	3.54	1.11	7 th
Loss of concentration at work	3.51	1.23	9 th
Having trouble recalling details or instructions	3.39	1.40	10 th
Displaying a severe and sudden lack of personal hygiene	3.50	1.16	11 th
Unusual violent behaviour towards co-workers on site	2.90	1.21	12 th
Needless risk taking behaviour	2.78	1.07	13 th
Reduced attention at work	2.77	1.21	14 th
Carelessness towards safety	2.75	1.03	15 th
Fidgetiness (restlessness)	2.65	1.35	16 th

3.4 Effects of substance abuse on workers' performance

The effects of substance abuse on performance of workers on construction sites were investigated and the result is shown in Table 4. Impairing employee's judgement/poor decision making received the highest rating (4.27), lower job productivity and performance was rated second (4.23), loss of concentration leading to poor quality work was rated third (4.14) while high rate of accidents came fourth (4.12). The effects that received the least ranking were hangover/withdrawal affecting Job performance (3.96), illegal activities at work including selling illicit drugs to co-workers (3.78), high possibility of developing mental disorder (2.67) and regular training of new employees to replace nonperformance ones due to effects of drugs (2.54).

Substance abuse affects the performance of construction workers in many ways. Workers under the influence of drugs are unable to follow instructions leading to poor decision making which affect their ability to correctly perform the tasks assigned to them. The perception among construction workers is that drugs give them strength to withstand workplace pressure. However, this presumed benefit is often temporal as the consumers usually become dizzy and weak thereby affecting their performance and lowering their productivity as well. Substance abuse is known to cause temporal loss of concentration leading to poor quality of work. This affirms the findings of Juergens (2021) which reported that workers under the influence of drugs are unable to focus or concentrate on tasks given to them. Workers under the influence of drugs on construction sites have high risks of injury due to accidents because they are often careless with safety issues. Construction works involve complex tools and machinery and working at significant height which increases the risk of injury when working

under the influence of alcohol or other drugs. Kollaer (2017) had earlier reported that alcohol and substance abuse contribute up to 65% of on-the-job accidents. Similarly, Russell (2017), had affirmed that substance abuse affects workers' performance either by missing work days, reporting to work late or even falling asleep while at work. This might have been rated low in this study but should be given adequate consideration on construction sites. It is therefore important that, project managers deploy the requisite strategies in preventing the use of drugs on sites in order to minimize its impact and guarantee project success.

Table 4: Effect of Substance Abuse on Worker's Performance

Effects	Mean	SD	Rank
Impairs employee's judgement/poor decision making	4.27	2.62	1 st
Lower job productivity and performance	4.23	1.10	2 nd
Loss of concentration leading to poor quality of work	4.14	1.00	3 rd
High rate of accidents	4.12	1.07	4 th
Lower morale and physical well-being of workers	3.98	1.13	5 th
Safety related issues at workplace	3.97	0.97	6 th
Significant losses of hours at work	3.86	1.10	7 th
Paranoia	3.85	0.85	8 th
High rate of absenteeism and turnover	3.74	1.22	9 th
Substance use disorders, depression and Trauma	3.69	1.15	10 th
Aggressive behavior/workplace violence	3.43	1.42	11 th
High rate of occupational related injuries	3.48	1.38	12 th
Tardiness/Sleeping on job	3.47	1.23	13 th
Hangover/withdrawal affecting Job performance	3.96	1.13	14 th
Illegal activities at work including selling illicit drugs to co-workers	2.78	0.42	15 th
High possibility of developing mental disorder	2.67	1.03	16 th
Regular training of new employees to replace nonperformance ones due effects of drugs	2.54	1.02	17 th

3.5 Strategies for Substance Abuse Management on Construction Sites

The abuse of substances on construction sites is a serious challenge that needs to be prevented or mitigated in order to guarantee the success of construction projects. Table 5 presents the respondents' rating of the strategies for managing substance abuse on construction sites in Jos. Testing and training of workers to help with workplace addiction issues was rated first (4.25), then developing effective workplace drugs and alcohol policies was second (4.18), adequate site supervision came third (4.10) while graphic posters of accidents and injuries directly due to substance abuse was rated fourth (4.08). Strategies that received the least rating were encouraging workers to be involved in sporting activities (2.97), including penalties for drugs on workers employment contract (2.95) and provision of counseling services to employees with drug related issues (2.84). The less effective strategies were zero tolerance for drugs abuse such thorough searching of employees on site (3.60), encouraging workers to be involved in sporting activities (2.97), including penalties for drugs on workers employment contract (2.95) and provision of counseling services to employees with drug related issues (2.84).

Project managers have adopted various strategies in managing substance abuse on construction sites. The efficacies of the strategies vary depending on the nature of substances and the operating environment. Testing construction workers randomly at interval will discourage them from engaging in drug abuse and would help in reduce the menace among workers. This affirmed the report of American Addiction Centre (2019) that, within two years of instituting drug testing in companies in some construction companies in the United States, there was a 51% reduction in injuries and 11% reduction in workers' compensation claims. However, in a similar study, drug testing produce a different outcome alluding to the fact that drug abusers might find drug testing very demeaning and would not want to submit biological samples (Deria and Lee, 2020). Notwithstanding, with adequate planning and proper

monitoring to ensure the right samples are obtained, drug testing either before recruitment or on-the-job will help in reducing the use and abuse of drugs on construction sites. Workers could also be trained on handling drug related issues such accidents and counseling of drug users towards rehabilitating them in order to mitigate to impact on drug abuse on the workers as well as the project. Clear and unambiguous statements prohibiting drug abuse on site, stating the penalties to offenders and adequate means of enforcing them would also help in managing the challenges. Most often, drugs are taken before work begins and during break. Adequate supervision during work and proper monitoring during break ensure workers do not engage in taking substances; and thorough searching as workers resume to site to ensure they do not smuggle in drugs would also help in preventing drug abuse. Displaying graphic pictures of drug related injuries as well as effects of drugs on health of consumers at strategic places would also be useful in discouraging workers from taking drugs. In addition, clearly spelt penalties for using drugs should be visibly pasted to educated workers and discourage them on taking drugs on site.

Table5: Strategies for Substance Abuse Management on Construction Sites

Strategy	Mean	SD	Rank
Testing and training of workers to help with workplace addiction issues	4.25	0.83	1 st
Developing effective workplace drugs and alcohol Policies	4.18	0.97	2 nd
Adequate site supervision	4.10	1.15	3 rd
Graphic posters of accidents and injuries directly due to substance abuse	4.08	0.93	4 th
Follow-up support system- counseling for first offence	3.98	1.12	5 th
Workplace programmes specific to alcohol and drugs	3.80	1.05	5 th
Less stressful work conditions	3.78	0.91	7 th
Random testing of workers	3.75	1.20	8 th
Pre-employment testing of workers	3.74	1.35	9 th
Harsh consequences for offenders (e.g. salary deduction, suspension from work)	3.63	1.43	10 th
Zero tolerance for drugs abuse such thorough searching of employees on site	3.60	1.52	11 th
Encouraging workers to be involved in sporting activities	2.97	1.30	12 th
Including penalties for drugs on workers employment contract	2.95	0.95	13 th
Provision of counseling services to employees with drug related issues	2.84	1.22	14 th

5. CONCLUSION

Substance abuse on construction sites is fast becoming an issue of serious concern in most developing economies such as Nigeria which needs to be tackled for effective management and delivery of construction projects. This study investigates the motives and common signs of substance abuse on construction sites, its effects on workers' performance and strategies for managing the abuse of substances and related drugs on construction sites. Construction workers engage in drugs on the guise that it boosts their energy level. The need for extra energy was found to be associated with the need to enhance job performance, boost self-confidence with the view to increase output since payments on many construction sites are on daily basis and performance based. However, it was revealed in the cause of this study that, these perceived energy increase does not last long to actually keep the workers performing on site as expected; instead, these drugs make workers to often feel dizzy and tired wanting to sleep at work. Workers under the influence of drugs are prone to making mistakes as they are often off balance both mentally and psychologically which in some cases degenerate into extreme mood swings thereby affecting relationship of workers on sites. This has accounted for most quarrels and in some cases physical combats amongst workers on construction sites. Substance abuse impairs workers judgement leading to low productivity; their concentration is also affected thereby affecting their ability to pay attention to details leading to poor quality of work. Substance abuse needs to be adequately prevented and its impact mitigated on construction sites; these could be achieved through training and random testing of workers to discourage them from engaging in drugs and other substances. Another key issue towards

effective preventing and mitigating substance abuse on construction sites is the development of drug-related policies stating clearly the consequences for engaging in drug abuse by workers. There is the need also keep workers under close watch by competent personnel since drugs are taken in hidden places such as the bathrooms and other blind spots.

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