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DEVELOPMENT AND PILOTING OF WORKPLACE SUBSTANCE USE PREVENTION, MANAGEMENT AND POLICY TRAINING MANUAL IN NIGERIA

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ABSTRACT

There has been growing need to improve the capacity of drug demand reduction practitioners to deliver substance use prevention interventions in different settings, especially in the workplace. This paper reports the findings from the pilot phase of the implementation of a training manual on substance use prevention, management and policy in the workplace in Nigeria. The aims of this study were to consider the feasibility of implementing a training manual for workplace substance use prevention, management and policy interventions in Nigeria; determine whether training objectives were met; assess trainer proficiency; and identify gaps for improvement. Instruments included a pre-post knowledge assessment developed by the author and a post-training survey adapted from the UPC manual that included several open-ended questions and a trainer proficiency survey. Participants were 40 attendees of a three-day training programme, drawn from a wide range of disciplinary and professional backgrounds. The training was conducted in Nigeria by Global Initiative on Substance Abuse (GISA). Participants completed both the pre and post-test survey. The mean difference between baseline scores and those observed following training demonstrate objective gains in foundational knowledge. The results were statistically significant ($p < .001$) and the effect size was large (1.866). All participants agreed that the training manual was implemented as designed, objectives met and that the course is relevant to their practice with an average rating of between 4.3 and 4.8 on a maximum scale of 5. All facilitators were ranked "proficient" (> 76%) in subject knowledge, ability to engage participants in the learning process, supervision of the training environment, time management, and demeanor. Participants universally agreed that the training was relevant, and findings provide preliminary evidence of feasibility and acceptability, and suggest that the manual can enhance foundational knowledge in workplace substance use prevention, management and policy in Nigeria.

Keywords: Substance use prevention, workplace, drug policy, drug demand reduction, capacity building, Nigeria

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INTRODUCTION

Substance use and abuse is linked to heavy health burden of morbidity and premature mortality particularly among the productive age bracket (Jones, 2016; Nicholson & Mayho, 2016; Spicer & Miller, 2016). The true scale of the consequences of substance use in working populations is difficult to quantify (Agwogie, 2011). Surveys indicate that 13% of all working responders and 29% of workers aged below 30 years reported substance use in the previous year (Anderson, 2012) suggesting high prevalence of substance use among this population; even as the workplace can be a risk factor for substance use (UNODC-WHO, 2018). Workplace risk factors include work related stress, monotonous work, shift work, work requiring relocation, frequent changes in co-workers and supervisors (International Labour Organisation [ILO], 1996). Workplace stress, particularly alcohol related, and where early interventions are not provided leads to substance use disorders (Anderson, 2012).

Burden of substance use in the workplace

The impact of substance use in the workplace is substantial. It impairs job performance through poor decision making and reaction times; loss of productivity due to absenteeism, arriving late at work and leaving early or disciplinary suspension; production errors and accidents which put at risk the safety of the individual, other workers, or the general public; a higher personnel turnover due to incapacitation and premature death; increased training and recruitment costs; inappropriate behaviour; financial mismanagement; theft and other crime; violence and destruction; poor co-worker relations, presenteeism, low company morale and workplace prostitution (Agwogie, 2011; Anderson, 2012; Holden et al., 2011; NACADA, 2020; Nicholson & Mayho, 2016; UNODC-WHO, 2018). In response to the burden and global challenge of substance use among the workforce, the International Labour Organisation in 1996 developed the Code of Practice for organisations.

ILO Code of Practice

The ILO code of practice was developed as a multidisciplinary approach to the management of alcohol and drug related issues in the workplace. The code of practice serves as a guideline for employers and organisations to implement appropriate measures to prevent, reduce and control psychoactive substances, including alcohol, in the workplace. According to the code, employers, together with employee representatives, should develop, in writing, a policy on alcohol and other substance use. The policy should include information and procedures on measures to control substance use in the workplace through good employment practices; restriction on psychoactive substances, legal and illegal, in the workplace; prevention through information, education and training programmes; identification; assistance, treatment and rehabilitation programmes; intervention and disciplinary procedure (ILO, 1996).

Substance use policy in the workplace

Policies on substance use refers to regulatory approach either in a setting or in the general population including the workplace (UNODC-WHO, 2018). Policy is the first step in implementing substance use interventions in the workplace

(Agwogie, 2011; Ashe & Nealy, 2005) and has been found to be effective (Spicer & Miller, 2016). Characteristics deemed to be associated with efficacy and/or effectiveness in substance use policy in the workplace includes: developed with the involvement of all stakeholders (employers, management, employees); guarantee confidentiality to employees; non-punitive; provide brief intervention (including web-based), as well as counselling, referral to treatment and reintegration services to employees who need them; include a clear communication component; embedded in other health or wellness related programmes (e.g. for the prevention of cardiovascular diseases); include stress management courses; training of managers, employees and health workers in fulfilling their roles in the programme; and the inclusion of alcohol and drug testing only as part of a comprehensive programme (Agwogie, 2011; Ashe & Nealy, 2005; UNODC-WHO, 2018). Surveys reveal that 84.2% of employees believe that there should be a substance use policy in the workplace (Ashe & Nealy, 2005) and to include all psychoactive substances, licit or illicit (NACADA, 2020). NACADA reported that while all psychoactive substances such as cocaine heroin, cannabis, methamphetamines, opioids and other prescription medications cause problem in the workplace, the impact of alcohol is significantly higher (NACADA, 2020).

Need for capacity building

Nigeria has long been plagued by the burden of disease and social problems resulting from psychoactive substance use (Agwogie & Bryant, 2021) and for decades, a global transit point for illicit drugs produced elsewhere (Alemika, 2013). Today, it has fast become a source nation, due to the cultivation and availability of cannabis in most parts of the country, the existence of clandestine laboratories for the manufacture of methamphetamine, and the continued availability of illicitly manufactured and diverted pharmaceutical products like tramadol and cough syrups containing codeine or dextromethorphan (Agwogie & Bryant, 2021). The National Drug Law Enforcement Agency (NDLEA) (2017) cited the significant increase (13.5%) in total drug seizures between 2016 and 2017 as an indication of higher demand for psychoactive substances in Nigeria. The extent of this demand is documented in the first comprehensive national drug use survey conducted in Nigeria (UNODC, 2018). The survey reported that the highest levels of past-year substance use was among those aged 25 – 39 years; two-third (9.5 million) of the people who use drugs reported missing school or work and does poor job at school or at work. The age 25 -39 represents one of the most productive age brackets in the workplace. They also suffer from both differential high rates of unemployment and stresses when joining the labour market (Anderson, 2012).

In the 2018 National survey, people who use drugs reported lacking access to treatment due to prohibitive costs, the prevalence of stigma, and a lack of knowledge about services and availability. While increasing access to low-cost evidence-based treatment services is essential, preventing the use of psychoactive substances, and associated consequences, among Nigeria's burgeoning at-risk youth and working population are of critical importance: 20.27% of the population are 15-24 years; 30.60% are 25-54 years old (CIA, 2020). These populations

are either transiting into the workforce, working or at the peak of their career. Okonkwo and colleagues reported that substance use among women, especially those who engage in one form of occupation or another, is on the increase with public health concerns (Okonkwo, 2012) and 25% of people who use drugs in Nigeria are women (UNODC, 2018). Consequences associated with women employee substance use includes sexual harassment in the workplace (Acquadro Maran et al., 2022; Pilgaard et al., 2025), multiple negative health- and work-related outcomes such as depression, anxiety, general stress, productive loss, decreased job satisfaction and decreased organisational commitment (Brown et al., 2010; Cortina and Berdahl, 2008; Willness et al., 2007).

Despite the evidence of high prevalence of substance use among the working population and the negative impacts in the workplace, there is no national policy in Nigeria on workplace substance use prevention and management to guide interventions. In organisations where policies are in place, they are not guided by scientific evidence on best practices. In some cases, they are single line rule of suspension or dismissal for substance use (Agwogie, 2011). In addition, there is a dearth of studies on the prevalence, pattern and economic cost of substance use among working-class in Nigeria due to limited capacity of stakeholders on workplace substance use prevention and management interventions. And little is being done to equip stakeholders with the necessary knowledge and skills on workplace interventions. When the issue of employees' substance use in the workplace is addressed by establishing comprehensive interventions, it is a "win-win" situation for both employers and employees (Agwogie, 2011).

The upward trend in psychoactive substance use, especially among the productive age population, and associated consequences demonstrate the need for a comprehensive workplace substance use prevention and management interventions through capacity building. This entails the training of policy makers, employers of labour, human resource managers, supervisors, employees and professionals to facilitate workplace substance use prevention and interventions; stress management; health and wellness; work environment improvement and identification of individuals with substance use problems in the workplace or organisation.

The training manual on workplace substance use prevention, management and policy is developed in line with ILO protocols and being tested for practitioners from a wide range disciplines and professional backgrounds, policy makers and stakeholders in the workplace in Nigeria. The primary aim is to equip stakeholders with the knowledge and skills needed to develop policy and implement effective substance use prevention and management interventions in the workplace settings (hereafter referred to as the Workplace Training Manual). This paper describes the development of the Workplace Training Manual and piloting in Nigeria to meet the broad goal of ILO Code of practice.

MATERIALS AND METHODS

Training Material Planning Stage

The Global Initiative on Substance Abuse (GISA), the central organisation

for the Universal Prevention Curriculum (UPC) in Nigeria with support from the Colombo Plan Drug Advisory Programme and the Bureau of International Narcotics and Law Enforcement Affairs (INL) commenced UPC Training of Trainers in Nigeria in January 2019 (Agwogie and Bryant, 2021). Building on this initiative, the author who is also an expert in workplace substance use prevention, management and policy reviewed 6 primary materials to develop the substance use prevention, management and policy training manual for pilot in Nigeria. These are: (1) Management of alcohol- and drug-related issues in the workplace (ILO, 1996), (2) Drug Abuse Prevention and Management in the Workplace (Agwogie, 2011), (3) International Standards on Drug Use Prevention (UNODC-WHO, 2018), (4) Universal Prevention Curriculum, Core Course (Colombo Plan DAP, 2018), (5) Workplace-Based Prevention Intervention (Colombo Plan, 2015) and (6) Drug Free American Foundation Workplace Materials (https://www.ndwa.org/drug-free-workplace/). The training manual was first tested with an in-house training of selected UPC national trainers on workplace interventions. Three of these national trainers, thereafter, conducted the pilot trainings in three batches, one face-to-face and two online with a total of 40 participants. Each of the trainings was conducted for three days, covering ten topics. Participants were recruited based on organisational requests for capacity building of their personnel and personal desire to advance knowledge on substance use, prevention, management and policy in the workplace. The training provides critical foundational knowledge and skills in a 10 topics sequence that introduces participants to the national and global overview of substance use, the science of prevention, the International Standards on Drug Use Prevention, ILO code of practice for substance use prevention and management in the workplace and key components of workplace substance use prevention and management policies (table 1).

Procedure

Once a training session was scheduled, recruitment flyers were circulated through WhatsApp platform and other relevant social media. Flyers included information about the workplace training and benefits for participation. Training was open to substance use prevention and treatment practitioners, policy makers, entrepreneurs, chief executive officers of private and public organisations, human resource department staff, supervisors, company doctors and nurses, coordinators of non-governmental organisations (NGOs) and other interested stakeholders in substance use prevention, treatment and policy. Those who completed a registration form indicating interest were issued an official letter of invitation to the training. Information collected at registration included age, gender, highest level of education, field of study, years of experience in the substance use field, and the organisational setting or workplace (government, NGO, private). Data were entered into an Excel spreadsheet.

Pre-Post Knowledge Assessment: The author developed and piloted a pre-post instrument with GISA working group to verify face validity, readability, and relevance to the knowledge and skills targeted for development in the training manual. The instrument consisted of 11 matched multiple-choice questions and 14 matched true/false questions designed to assess knowledge across 3 domains:

Table 1. Workplace Training Manual

Workplace Training Manual, Learning Objectives	
Topics	**Learning Objectives**
Topic 1: Introduction to Workplace Prevention Interventions	• Describe the importance of substance use prevention • List different settings where substance use prevention occurs • Workplace as a setting for substance use prevention • Provide an overview of the problem of substance use in the workplace
Topic 2: National and Global Overview of Substance Use	• A review of the National Drug Use Survey in Nigeria • Adult population in the workforce in Nigeria • Describe the local and global substance use problems • Global trend in substance use and workplace
Topic 3: Physiology and Pharmacology for Substance Use Prevention	• Define psychoactive substances • Discuss the brain development and impact of substance use on the brain • List general ways in which psychoactive substances affect mood, thoughts, and behaviour and why • List the main categories of psychoactive substances and several substances within each • Discuss the implications of pharmacology of psychoactive substances for prevention in the workplace
Topic 4: The Role of Workplace in Substance Use Prevention	• Understand the cultural context of workplace in the society • Identify peculiarities in workplace settings • Learn about the interaction between workplace, families and communities, and how these impacts on one another • Learn how the workplace contributes to an increased risk for substance use or protects working adults from substance use behaviours
Topic 5: Why Workplace is an Important Setting for Substance Use Prevention Interventions	• Present international prevalence figures regarding substance use among adults, especially the working adults • Describe in general terms the scope of the problem of substance use among working adults • Understand the impact and cost of substance use for workplaces, workers and their families, and society generally • Learn the advantages and return-on-investment of implementing substance use prevention programmes in workplaces • Discuss the formal and informal workplace settings in Nigeria and adults in these settings • Learn about the Corporate Social Responsibility of workplaces and substance use prevention
Topic 6: Key Components of Workplace Substance Use Prevention Policies	• Describe the characteristics of effective, comprehensive workplace and workforce substance use prevention policies and strategies • Describe the entire continuum of a comprehensive workplace prevention (i.e., from prevention through post treatment re-entry) • Introduce the concept of workplace substance use prevention as a health and safety issue • Address the issue of drug testing in the context of a comprehensive approach to substance use
Topic 7: Overview of UNODC International Standards Evidence-Based Prevention Programmes	• Learn the concept of “evidence-based” programmes • Discuss the different types of evidence-based workplace practices listed in the UNODC International Standards • Implementing evidence-based practices listed in the UNODC International Standards within the Nigeria workplace settings

Topic 8: Implementing and Adapting Workplace-Based Programmes	• Provide an overview of the guidelines/steps of programme selection and implementation • Identify the steps of programme implementation • Provide an overview of issues to consider in adaptation • Describe some of the barriers to implementation and strategies for overcoming them • Discuss the importance of monitoring and evaluation and important workplace outcomes
Topic 9: Overview of The International Labour Organisation (ILO) guidelines on management of alcohol and drug related issues in the workplace	• Learn alcohol and drug policy development process in the workplace • Identify general duties, rights and responsibilities in the workplace • Learn about workplace assistance, treatment, and rehabilitation programmes • Learn disciplinary procedures on issues relating to substance use
Topic 10: Developing drug free workplace policy	• Review of drug free workplace policy in selected countries • Learn how to identify gaps in drug free workplace policy and way out • Review of national drug policy and workplace drug policies in selected countries

Adapted from ILO (1996), Agwogie, (2011), UNODC-WHO, (2018), Colombo Plan, 2015 and 2018) and Drug Free American Foundation Workplace Materials.

(i) the science of substance use: This domain consisted of 8 test items. For example, "psychoactive substances alter the functioning of the central nervous system, such as", (a) the brain, the lungs and the liver, (b) the skeletal system, (c) the brain and the spinal cord, and (d) the brain, ear, nose and throat. Another item asked, "the faster psychoactive substance hits the brain, the greater and more rewarding its effects and the greater potential for addiction and other related consequences", (T/F).

(ii) primary objectives/types of effective prevention strategies in the workplace: Nine test items measured knowledge gained under this domain. For example, "in developing workplace drug policy, emphasis should be on", (a) prevention, (b) treatment, (c) recovery, and (d) all of the above. Another question was, "an employee with a biological family history of alcohol use disorder would be best served by", (a) selective prevention intervention, (b) universal prevention intervention, (c) indicated prevention intervention, and (d) universal treatment intervention.

(iii) the knowledge and skills required for certification as professional substance use prevention: Eight test items measured this domain. For example, "which of these is correct in ethical decision making for substance use prevention professionals?", (a) plan – assess – implement – evaluate, (b) assess – plan – implement – evaluate, (c) evaluate – plan – implement – assess, and (d) assess – plan – evaluate – implement. Another example was, "based on ethical guidelines, a prevention practitioner who has completed the relevant courses and training can claim to be credentialed", (T/F).

Each of the 25 test items were rated equally and coded 1 for correct answer with 0 as incorrect answer. The reliability coefficient was measured in Cronbach

alpha for each of the domains. A paired samples t-test was conducted along with Cohen's D using standard deviation (SD) of pre–post difference scores to assess effect size (Salkind, 2010). Analysis was carried out using SPSS Version 23.

Post Training Evaluation: The post training survey was adapted from the UPC Core Manual (Agwogie and Bryant, 2021) and administered on the last day of the training. It contained 20 items to assess aspects of the training across 4 domains: course content and design; programme delivery; training relevance; and practitioners' development of self-efficacy. Answers were based on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Means, SDs and Cronbach alpha were calculated under each domain.

To solicit comments on participants' experiences and input to the training manual, the survey included 4 free-text questions asking participants: What did you like most about the training? What did you like least about the training? What information (if any) was missing from the training that you think is important? Do you have any other comments or remarks? Comments were entered into a Word document and analysed thematically using the 5 step Framework Method for qualitative data (Gale et al., 2013; Pope et al., 2000) and considering the four levels of measurement in evaluating a training programme (Kirkpatrick, 1971). This approach was chosen for its value in bringing programme theory to the surface. Analysis was grounded in the original accounts of the practitioners but began deductively by drawing a priori on the aims and objectives of the training manual.

A conceptual framework was developed by the author to begin a content analysis process, bring the fractured data together into a coherent whole and to support understanding of the relationships between categories. As an initial step in the development of the framework, the author, with the support of GISA team, some of whom have had previous qualitative research experience reviewed the responses to identify preliminary themes and coded the data. In order to monitor the author's own developing interpretations and constructions, reflective journaling was conducted throughout the process. Frequent interactive sessions were held with the GISA team and 2 independent researchers who are experienced in qualitative design. These meetings provided an excellent opportunity both to discuss the development of new themes and to question and confirm saturation of themes. This further supported recognition of and attention to researcher bias. Disagreements at every stage of the process were resolved through meetings between the author and the two independent researchers.

Trainer Proficiency: The participants were asked to rate their facilitators in five areas. Two address individual characteristics: knowledge of subject matter and demeanor. Three items are related to process: participant engagement, supervision of the training environment, and time management. For each question, facilitator proficiency was measured on a 4-point scale: 1=Developing, 2=Adequate, 3=Approaching proficiency, and 4=Proficient.

RESULTS

Participants

Forty participants from 19 different organisations received the 3-day training

conducted in three cohorts between November 2019 and February 2021. Participants ranged in age from 26 to 56+; the majority were female (52%); 48% were male. Two and half percent held a National Diploma/Nursing Certificate or equivalent, 27.5% held first degree or equivalent while the majority (70%) held advanced degrees. More than a third of attendees (40%) had five years or less experience in the substance use field; 27.5% had between 6-10 years, 17.5% had between 11-15 years, and 10% had 21 or more years of experience in the field.

Practitioners represented a wide range of disciplinary and professional backgrounds (Table 2). The two fields of medicine/ surgery, pharmacy, pharmacology / toxicology, psychiatry, and accounting/ economics/marketing/management/ business/public administration had a quarter of the participants each (25%); psychology, guidance & counselling had close to a quarter (22.5%) and others representing a vast array of disciplinary and professional backgrounds that included law enforcement, ministries, biochemistry and occupational therapy (17.5%).

Table 3 includes the results of the pre and post-test knowledge assessment. Of the total number of participants, 37 (92.50%) completed both the pre and post-test survey. The mean difference between baseline scores and those observed following training demonstrate objective gains in foundational knowledge. The results were statistically significant ($p < .001$) and the effect size was large (1.866).

Data on reliability of the instruments were analysed using Cronbach alpha and it demonstrated good internal reliability across the three domains with the following coefficients: 0.72 (the science of substance use), 0.78 (primary objectives/ types of effective prevention strategies in the workplace), and 0.73 (the knowledge and skills required for certification as professional substance use prevention). Ideally, Cronbach alpha coefficient should be above 0.6 (Nunnally & Bernstein, 1994; Pallant, 2005). Therefore, it was safe to conclude that the instrument and its subsections used for the study were reliable.

Table 4 displays results for the post training evaluation. The survey questions were re-ordered for the purpose of presentation. Out of the total number of participants, 34 (85%) completed the post training evaluation. Findings were notably consistent across each domain.

Manual and content design: Nine test items measured manual and content design with mean ratings above 4.3 on the 5-point scale and Cronbach alpha was 0.95. All participants agreed that objectives and outcomes were clear, content was up to date, materials were useful, and that the number and sequence of

Table 2. CORE Participants

Field of Study / Professional Background	Number of Participants
Medicine/ Surgery, Pharmacy, Pharmacology /Toxicology, Psychiatry	10 (25%)
Accounting/Economics/Marketing/Management/Business/Public Administration	10 (25%)
Psychology, Guidance & Counselling	9 (22.50%)
Nursing, Public Health, Social Work, Sociology	4 (10%)
Other	7 (17.50%)
Total	**40**

Table 3. Pre- and Post-course knowledge assessment

Total score N = 37	Pre-course	Post-course	Difference (post-pre-course)	*P value*	Effect size Cohen's D
Mean (SD)	12.9459 (2. 98092)	18.2162 (2.65764)	5.2703 (.3233)	< .001	1.866

Table 4. Manual Post Training Evaluation (November 2019 – February 2021)

N=34	Rating Scale: 1=Strongly Disagree; 5=Strongly Agree	Mean (SD)
	Manual Content & Design	
1:	Course content is consistent with the training objectives and outcomes	4.82 (0.39)
2:	Course content provides up to date information	4.24 (0.78)
3:	Training materials are adequate and useful	4.53 (0.51)
4:	Training objectives are clearly stated and measurable	4.79 (0.41)
5:	Sequence of training manual is organised and easy to follow	4.32 (0.68)
6:	Number of topics is sufficient to achieve objectives	4.71 (0.52)
7:	Sufficient time is allotted to accommodate trainees' inquiries	4.77 (0.43)
8:	The time allotted is sufficient to cover the topics and exercises in the manual	4.88 (0.33)
9:	The graphics are culturally appropriate	4.65 (0.54)
Domain-level scores (M = 4.63, SD = 0.51, α = 0.95)		
	Programme delivery	
10:	The training methodology used promotes maximum learning experiences	4.62 (0.55)
11:	The training activities reinforce the learning of important concepts	3.79 (0.98)
12:	The illustrations used are relevant and reinforce important concepts	4.52 (0.51)
13:	Training approach is well-balanced in terms of contents, activities and interaction	4.29 (0.63)
Domain-level scores (M = 4.31, SD = 0.67, α = 0.90)		
	Relevance	
14:	I believe this training will be useful in my work environment	4.82 (0.39)
15:	The training has stimulated and provided me with new insights and knowledge about substance use prevention	4.82 (0.39)
16:	The course content is relevant to my work	4.71 (0.76).
Domain-level scores (M = 4.78, SD = 0.51, α = 0.86)		
	Self-Efficacy	
17:	I feel better equipped to provide evidence-based substance use prevention	4.50 (0.71)
18:	This training has stimulated me to inform others about what I have learnt these past days	4.50 (0.66)
19:	I have learnt new things that I feel I will be able to pass onto others	4.59 (0.50)
20:	I feel more capable of discussing substance use prevention with people and organisations in this field	4.47 (0.56)
Domain-level scores (M = 4.52, SD = 0.61, α = 0.95)		

topics were sufficient to achieve training objectives.

Programme delivery: mean ratings from the 4 evaluation items were between 3.79 and 4.62 with 0.90 reliability coefficient using Cronbach alpha. All agreed that the training methods promoted maximum learning experiences, training

activities and illustrations reinforced the learning of important concepts, and that content, activities, and interaction were well balanced.

Course relevance: mean ratings were between 4.71 and 4.82 on the 5-point scale, Cronbach alpha was 0.86. Practitioners agreed that course content was relevant, would be useful to their work environment, was stimulating, and provided them with new insights and knowledge about substance use prevention. Three test items measured this domain.

Development of self-efficacy: mean ratings from the 4 items were above 4.5 on the 5-point scale and Cronbach alpha was 0.95. All participants felt that they were better equipped to provide workplace substance use interventions, were motivated and able to share what they learned, and felt capable of discussing workplace interventions with people and organisations in the field.

Table 5 displays participants' assessment of facilitators on a minimum scale of 1 and maximum of 4 points. The scores for each facilitator on each of the measures were summed and converted to percentage. Only participants who rated the 3 facilitators on all the measures (n=34) were included in this computation. The outcomes were grouped into four, developing (0 – 25%) to proficient (76 – 100%) to describe the level of proficiency of the trainers. Participants' ratings placed the three facilitators in the highest band in subject knowledge, their ability to engage participants in the learning process, supervision of the training environment, time management, and demeanor.

Thematic Analysis

Out of the 34 surveys completed, there were 100 responses to the questions posed, which were distributed accordingly Q1: What did you like most about the training? (n=35); Q2: What did you like least about the training? (n=22); Q3: What information (if any) was missing from the training that you think is important? (n=13); Q4: Do you have any other comments or remarks? (n=30).

After viewing the data set as a whole, comments were organised into three themes: Facilitators, Social Validation, and Programme Adaptation. The following comments exemplify categories in each theme.

Theme 1: Facilitators

This theme was broken down into 3 interrelated categories.

Characteristics: Positive comments about facilitators' characteristics (their competence, commitment, wealth of experience), are consistent with findings from participants' assessment of facilitator proficiency in Table 5.

Table 5. Assessment of Facilitators

Scale: Developing (0-25%) Adequate (26-50%) Approaching Proficiency (51-75%) Proficient (76-100%)
N=34

	Knowledge of subject	Participant engagement	Supervision of training environment	Time management	Demeanor
Trainer 1	97.06	96.32	97.79	94.85	98.52
Trainer 2	94.12	93.38	95.59	96.32	97.06
Trainer 3	88.24	91.91	94.85	94.11	88.97

Programme Delivery: The comments on delivery align with adult learning principles. For instance, simplifying tasks for manageability motivate learners to extend their current skills (Lave and Wenger 1991). They also reflect the pivotal role of facilitators Form of Delivery (FoD) (Dombrowski et al., 2016), the ability of facilitators to guide, impact skills, and use effective examples to bring the content home are important in adult learning. According to one of the participants, "the delivery of the training and the practical experience, increased knowledge about substance use and measures to address substance use in the workplace".

Environment: Comments in this category also reflect trainer proficiency and the quality of programme delivery. Participants felt free to engage and ask questions and found facilitators' responses productive which reflect the importance of an informal non-threatening environment and positive constructive feedback (Hammick et al., 2007). The comments on interaction provide insight into participants' interactive experiences and highlight salient features of adult learning of mutually beneficial reciprocal learning. For example, one of the participants noted "I value the interactions with the facilitators and fellow learners, it affords us the opportunity to share knowledge and experience". Another participant summed it up this way: "This is an important learning opportunity, expository about new area of training/ knowledge that was hitherto ignored and now brought to the front burner".

Theme 2: Social Validity

Some of the comments such as "excellent job by the presenters", "the training is extremely rewarding", "effective communication by the facilitators", "I had a great time during the training", "the training is relevant and timely", "God bless GISA", "keep up the good works you are doing with this untouchable subject" and "thank you for helping to save lives" highlighted the practical, professional, and social value of the training. One of the participants wrote: "I encourage you to write proposal to organisations to train more people on this subject". And another wrote: "Before the training, I was wondering how it was going to be, but when we started, it was an eye opening. The materials provided are wonderful".

Theme 3: Adaptations

Training duration: Though some participants observed that the 3 days training was too short, but the survey results show that the time allocated for training was sufficient with 4.8 on a scale of 5 points. Clearly, time was an issue for some considering the long duration of each day's activities.

Adaptation to context: Some participants expressed concerns over the lack of local data and practical summary on already implemented workplace interventions in Nigeria. One of the participants noted: "There is so much happening in this area of substance abuse in Nigeria, yet there are no evidence and data on workplace interventions". Considering the widespread need for training and exposure to this important setting in substance use prevention in Nigeria, accumulating relevant local examples and experience will take time.

DISCUSSION

The substance use prevention, management and policy in the workplace training

manual was developed to enhance the capacity of drug demand reduction practitioners, policy makers, employers of labour and employees for effective substance use interventions in the workplace. The workplace provides several opportunities for implementing substance use prevention and management strategies, since most adults are in some form of employment. Substance use in the workplace is one aspect of employees' personal/job relationship that most employers, supervisors and human resource personnel do not either care about or are handicapped. In most cases, it is usually a single line rule of suspension or termination of appointment. This position is borne out of the misconception that substance use and abuse by an employee is his/her personal problems. Where issues of employees' substance use are addressed by establishing comprehensive programmes, it is a "win-win" situation for both employers and employees (Agwogie, 2011). A study of the economic impact of substance abuse treatment in Ohio, United States found significant improvements in job-related performance: 91 percent decrease in absenteeism, 88 percent decrease in problems with supervisors, 93 percent decrease in mistakes in work, 97 percent decrease in on-the-job injuries (Koenig et al., 2005).

Addressing the issue of substance use in the workplace requires adequate knowledge and skills through capacity building of drug demand reduction practitioners and key stakeholders in the workplace setting. Despite the extraordinary burden of substance use in Nigeria, prevention and treatment is hampered by the limited capacity of practitioners to deliver evidence-based interventions (Obot, 2004; Agwogie & Bryant, 2021). Additional problems include resistance to change among stakeholders, lack of funding for drug-based interventions, and apathy toward programme monitoring and evaluation (Anetor & Oyekan, 2018).

Contrary to popular belief, most people who use psychoactive substances, including alcohol and tobacco, are engaged in different work settings. The effect on the employees' health, safety and work performance can jeopardize productivity and curtail competitiveness. This impedes workplace activities. This can be appropriately addressed through workplace substance use prevention, management and policy. Effectively implemented substance use prevention, management and policy in the workplace offers employers a chance for early identification, intervention and support for employees with substance use disorders. This consequently benefits the employer, employee, family and the community at large.

The objectives of the training manual on substance use prevention, management and policy in the workplace are to specifically provide a framework for: (i) prevention of substance use in the workplace and among employees in both formal and informal sectors; (ii) identification and management of substance use problem at the earliest stage; (iii) protection of the health, safety and welfare of employees by offering support for people with substance use disorders and related problems and (iv) promoting the development of workplace policy on substance use prevention and management as one of the first steps in workplace interventions.

This study reports the response of Global Initiative on Substance Abuse (GISA) to the challenges of substance use among the adult population in the work settings

in Nigeria through capacity building of practitioners in the field of drug demand reduction and management staff in the workplaces. To the author's knowledge, this is the first study to report outcome of training on workplace substance use prevention, management and policy intervention. It is also the first step toward socializing participants into the concept, values, ethics and terminology of workplace substance use prevention science in Nigeria. Although many drug demand reduction practitioners in Nigeria hold academic credentials in health and social science fields, a needs analysis identified a lack of knowledge, skills and competencies required for educating the public, providing evidence-based services, and conducting research (Obot, 2004). The testing of this training manual was undertaken as an important first step toward addressing these needs.

The outcome of this study demonstrated significant objective knowledge gains related to the effects of psychoactive substances in the workplace, the science of evidence-based prevention and policy interventions in the workplace, and knowledge, skills, and attitudes required of substance use prevention professionals to intervene. Training programmes were evaluated to determine the extent of short-term knowledge, skills and abilities delivered through training which are expected to be translated into performance. An effective training programme is one that addresses training needs and delivers training according to training objectives (Devi, & Shaik, 2012). Equally important, participants reported a sense of self-efficacy in their ability to communicate their learnings to other stakeholders in the work setting. Having confidence in one's ability to perform specific skills increases the likelihood of their application in practice (Arora, et al., 2010). Irrespective of their diverse professional background and work settings, the outcome of this preliminary study demonstrates the need for a common foundation for practitioners to address substance use in the workplace.

The facilitators and teaching methods were highly rated, indicating that GISA trainers are well-aligned with educational best practices. Principles of adult learning are key mechanisms for well received interprofessional education and facilitator development is essential to programme effectiveness (Hammick et al., 2007).

It is significant to note that while the post-training evaluation ratings were uniformly high, many above 4.5 on a 5-point scale, one of the items had a mean rating of 3.79 (Table 4). The reason for the low rating is not very clear. This calls for more attention and improvement in subsequent trainings.

CONCLUSION AND RECOMMENDATION

Participants in this study work in varied workplace settings that include diverse workplace culture and norms, professional background, and years of experience. That they all agreed upon the relevance of the training in enhancing fundamental knowledge provides preliminary evidence of feasibility and acceptability of a standardized workplace substance use prevention, management and policy training manual in Nigeria. Therefore, it is recommended that a national policy on workplace substance use prevention, management and policy in Nigeria be developed by relevant stakeholders through collaborative efforts. The stakeholders

should include but not limited to the Federal Ministry of Labour and Productivity, National Drug Law Enforcement Agency (NDLEA), Federal Mistry of Health, Nigerian Society of Substance Use Prevention and Treatment Professionals (ISSUP), Labour Union among others. This will set the pace for public and private sectors to develop their organisational drug policies. In the absence of national and organisational policies, it becomes difficult to implement what is not available. These recommendations are, however, grounded in broader evidence plus this initial pilot study. Considering that participants in this pilot phase of the training were recruited through self-interest and organisational motivation, it is recommended that the manual be tested in less specialised audiences or with organisations that are not presently involved in substance use prevention, treatment and recovery.

LIMITATIONS

Bias is inherent in subjective assessments of self-efficacy, self-selection and organisational motivation that findings may not generalise to less-engaged organisations or those without prior interest in substance-use prevention. Similarly, bias is inherent in single-provider model where GISA developed the manual as well as delivered the training. Another limitation is the lack of control group and a central mechanism for following up with participants, which has implications for future training and monitoring the transfer of learning to practice. Furthermore, the number of participants and organisations were not a representative sample of the workforce and work settings in Nigeria. Lastly, the same items were used for the pre- and post-training learning outcomes and may have inflated gains due to test familiarity.

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CONFLICT OF INTERESTS

No conflict of interest

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