



Therapeutic Landscaping Elements in Drug Rehabilitation Centres in Nigeria: A Means for Patients Recovery

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ABSTRACT

Nigeria is faced with the challenge of coping with the continuous increase in the number of drug addicts admitted into the society. This in turn has led to the significant increase in the national budgetary health allocation to cater for the treatment and rehabilitation of these individuals. Thus, it has become imperative to cater for these individuals in health care facilities where they can be properly managed and this has led to the need for rehabilitation centres. Further study conducted revealed that incorporating nature in the design of spaces play a key role in creating environments that promote the mental and physical wellbeing of their occupants and this makes the incorporation of therapeutic elements in the design of rehabilitation centres necessary in aiding patient's recovery. The study therefore assessed the use and effectiveness of therapeutic elements as a treatment method in drug rehabilitation centres with a view of improving the wellbeing of patients. The study adopted a case study approach and data gotten were derived from personal observation and documentary evidences. The study concluded that plants are the basic natural elements used while artificial elements such as walkways and fences are the dominating artificial elements, but these elements have not been fully tapped in Nigeria because they are either completely absent or those present are basically for aesthetic functions. The study further recommends that designs of rehabilitation centre should incorporate the use of therapeutic landscape elements right from its inception.

Key words: Drug Abuse, Healing gardens, Landscape design, Rehabilitation Centres, Therapeutic landscape elements

INTRODUCTION

In Nigeria, drug abuse and addiction is becoming increasingly widespread and a significant rate of the national budgetary health allocation is used for treatment and rehabilitation of individuals with drug abuse issues (Olutola, 2012). Abdulahi (2009) viewed drug abuse as the use of drugs to the extent that it interferes with the health and social function of an individual. Thus, it has become imperative that individuals with drug induced issues be housed in an environment where they can be taken care of. This is because atmosphere and design of a place can affect the psychology and the mood of humans in rehabilitation centres. Research has further explained that the philosophy of rehabilitation takes care of the patient's state of mind, it provides activities, educates people to be able to perform daily activities through the process of adaptation (Remsburg and Carson, 2006).

Researches have proven that incorporating nature in the design of spaces play a key role in creating

environments that not only support their intended purpose but promote the mental and physical wellbeing of their occupants (Green, 2012). It is common to hear that contact with nature in its diverse forms, promotes human health. This is the basic tenet of therapeutic landscape design which is based on the assertion that humans have an innate connection with nature that should be expressed in their daily lives. Its principles entail introducing nature into building designs to help promote health, give a sense of relaxation and avoid tedious scenes.

A wealth of studies over decades proves that landscape design can reduce stress, improve cognitive function and creativity, improve our wellbeing and expedite healing (Gillis and Gatersleben, 2015).

In view of this, the study aimed at the integration of therapeutic landscaping elements in drug rehabilitation centres with a view of improving the wellbeing of patients. The study further

determines the landscape elements used in existing rehabilitation centres and assess their effectiveness. Furthermore, it will give an in-depth understanding of therapeutic landscape design and its strategies in improving health. It explores the need for drug addicts in health care facilities to have access to nature while using the therapeutic landscape concept as a framework for design.

LITERATURE REVIEW

Rehabilitation

Rehabilitation is restoring someone to a useful place in society and as such, a rehabilitation centre is a location where rehabilitation occurs (Edward, 2012). Rehabilitation refers to services designed to assist individuals who have experienced a trauma or illness that results in impairment which create loss of physical, psychological, social, or vocational functions (Remsburg and Carson, 2006). It is founded on the premises that all individuals have inherent worth and have the right to be experts in their own health care (Gender, 1998).

Drug Abuse

In pharmacology, a drug is a chemical substance used in the treatment, cure, prevention, or diagnosis of disease or used to otherwise enhance physical or mental well-being. It constitutes the use of any outside therapeutic indications in excessive dose levels or over an unjustified period of time (Tupper, 2012). There are different kinds of drugs including the hard drugs and the prescribed drugs. Drug abuse could be the hard drugs which includes cocaine, weed among others while prescribed drugs such as codeine can be abused when used wrongly as a stimulant.

Prevalence Rate of drug abuse in Nigeria

From the record of drugs abuse in Nigeria, the Northwest has a statistic of 37.47 percent of the drug victims in the country, while the Southwest has been rated second with 17.32 percent, the south-East is being rated third with 13.5 percent, North-central has 11.71 percent, while the North-east zone has 8.54 percent of the drug users in the country (Akannam, 2008). In Nigeria, the estimated life time consumption of cannabis among the population is 10.8%, followed by

psychotropic substances like benzodiazepines and amphetamine-type stimulants 10.6 %, heroin 1.6 % and cocaine 1.4 %. Drugs abuse appears to be common among males with 94.2 % than females 5.8 % and the age of first use is 10 to 29 years (UNODC, 2017).

Landscape and Health

The influence of landscape on health has already been stated extensively (Frumkin, 2001; Maller *et al.*, 2006). Gesler's (1992) concept of therapeutic landscapes and the consecutive development of this concept helped to systematically investigate the links between health and landscape. It has been recognised as a mixture of both non-pathogenetic health concepts and health geography's perception of the cultural turn (Kearns and Joseph, 1993). Gesler defined different aspects of a therapeutic landscape including the physical environment, the social environment and the spiritual environment. His case studies mainly investigated places clearly dedicated to healing, like Epidaurus in Greece, Lourdes in France or Bath in Great-Britain and recognised mainly the physical and spiritual environment on a naturalistic or humanistic level (Gesler, 1998). In the late 1990s, the focus on traditional healing landscapes was recognised to be just one aspect of therapeutic landscapes (Williams, 2007). Subsequent studies broadened the use of the concept and also addressed non-traditional healing landscapes, such as home environments (Williams, 2007) or summer camps for children (Thurber and Malinowski, 1999). To date the therapeutic landscape model focuses on health promotion and the role of everyday landscapes as landscapes of health. Thus, the need for the exploitation of the healing benefits of landscape for rehabilitation centres will be expatiated in this study.

Therapeutic Landscaping Elements

According to Yeo (2000), therapeutic landscaping elements are grouped into Natural and Artificial elements. Natural elements are trees, shrubs, flowers, herbs, ponds, lakes, streams preserved, altered, accentuated and destroyed timber, rocks etc. Man-made elements are fences of various

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materials, seat, signage, stairs, artificial water bodies such as fountains, swimming pools etc.

Design guidelines for all therapeutic gardens and the use of landscape elements

1. Visual Access

Visual access to outdoor space is critical. People are much more likely to visit a garden that they can easily see. Also, windows provide visual access to nature and natural light even when people cannot go outside.

2 Physical Access to Gardens

Gardens should be easy to get to and transitions between indoors and outdoors should be smooth.

3 Pathway of Gardens

The primary pathway should be flat, with no steps and a grade no greater than 2 %.

4 Provision of Utilities in Therapeutic Landscape

Trash and recycling receptacles should be provided especially near benches and at the entrance. Receptacles should be attractive and must be emptied regularly.

5 Lighting of Therapeutic Landscape

Aesthetic lighting that extends views to the garden should be provided.

6 Water Features and Therapy

Water features provide positive distraction or something interesting to look at and listen to, a destination to aim for and an attraction for wildlife.

METHODOLOGY

This research sets out to determine and assess the therapeutic landscape elements used in

rehabilitation centres with the view of integrating the use of therapeutic landscaping elements in the design of a drug rehabilitation centre. The research employed a case study approach which is a qualitative approach. Data were gotten through personal observations and review of documentary evidences. Four rehabilitation centres, comprising three domestic centres in Nigeria and one foreign were observed. These rehabilitation centres are Plateau State Rehabilitation Centre, Jos, Bauchi State Rehabilitation Centre, Bauchi, Rehabilitation Centre for the Disabled, Moniya, Ibadan. And Sea ridge Drug Rehabilitation Centre Nova Scotia, Canada. The survey was conducted by critically observing the landscape elements of these existing rehabilitation centres and analysing their role in aiding recuperation of patients.

Case Study One: Plateau State rehabilitation centre, Jos, Nigeria

The centre was established in 1982 by the Plateau State Government to train people with disabilities, however, due to the increase in the number of drug addicts it was converted to a rehabilitation in 2004. Facilities present includes Administrative block, counselling unit, two stores, ten skills acquisition laboratories, two classrooms and a dining hall. Landscape elements in this facility include trees, lawns, relaxation spots and many covered and opened walkways.



Plate 1: Pictorial View of Plateau State Rehabilitation Centre Showing Poorly Maintained Lawn
Source: Researcher's Field work, August, 2018

Case Study Two: Bauchi State Rehabilitation Centre, Bauchi, Nigeria

The centre was established in 1990 by the Bauchi State Government initially as a women centre under the Ministry of Women Affairs. But in 2006

the centre introduced the department for the rehabilitation of drug addicts. Notable environmental features include; carpet grasses and canopy trees, open relaxation areas, long and narrow verandas and unpaved paths.



Plate 2: Exterior View of Ibrahim Sani Abacha Rehabilitation Centre, Bauchi State
Source: Researcher's field work, August, 2018

Case Study Three: Rehabilitation Centre for the Disabled, Moniya, Ibadan Oyo State

The Rehabilitation Centre for the Disabled, Moniya, Ibadan, Oyo State, is located in Moniya. Major facilities are staff quarters, religious centres, the football field, the administrative block,

education block, workshops, dining hall, clinic, dormitories (male and female), poultry and lodge for SIWES and SPED students. Environmental features include trees and grasses which form an integral part of the landscape, covered and opened walkways among several others.



Plate 3: Pictorial View of Rehabilitation Centre for the Disabled, Moniya, Ibadan
Source: Researcher's Field work, August, 2018

Case Study Four: Sea Ridge Drug

Rehabilitation Centre Nova Scotia, Canada

Sea ridge Drug Rehabilitation Centre is a drug addiction treatment facility that aspires to support, challenge and inspire individuals struggling with drug addiction dependencies. It was founded to meet the needs for a drug rehab centre in Nova Scotia, Canada that provides an elevated level of

quality to recovery. Sea ridge stands among Canada's best alcohol and drug rehabilitation centre, recognized for excellence in evidenced based psychotherapy and a high rate of successful addiction recovery and the spirit. Some of the notable landscape features include waterfall, healing pools, water fountain, trees and lawns, covered and opened walkways.



Plate 4: Pictorial View of Admin Block Sea Ridge Drug Rehabilitation Centre
Source: Parry et al, (2009)

FINDINGS

Determine the Therapeutic Landscaping Elements in the Drug Rehabilitation Centres

From the study, it is evident that most Nigerian rehabilitation centres are limited to the use of plants, block wall fences, signage, plaque, stairs and walkways. However, the use of unplanned footpath is common while walkways linking buildings are mostly covered. The use of open relaxation spaces are also important elements noticeable in these designs. Furthermore, curbs, lighting fixtures were sparsely used. Sea Ridge centre however, exploited the use of healing pools and therapeutic gardens.

Assess the Effectiveness of Landscaping Elements in the Existing Drug Rehabilitation Centres

The use of landscaping elements in Nigerian has not been fully effective as most rehabilitation centres have not incorporated the use of these elements in the recovery of patients. Basic elements used in Nigeria are plants and these are meant for aesthetics purposes. Other elements like fences and walkways which provide security and paths respectively are not incorporated to aid patient's recovery. An effective approach to patient's recovery is the use of open relaxation centres as this gives patients access to nature, hence, easing them of accumulated mental stress. However, Sea Ridge centre exploited the use of healing water features to aid patient's recovery.

DISCUSSION OF FINDINGS

Base on the study conducted, it is evident that landscapes elements are used in most rehabilitation centres and this conforms to Yeo (2000) assertion. In Nigeria, plants, walkways and open spaces are the dominant landscape elements used in rehabilitation centres. However, the use of fences, solid concrete or paved walkways are the basic artificial elements used. Nonetheless, the use of water features despite its creative effect has not been fully incorporated in the design of these centres.

Also, the use of landscape elements as a therapeutic agent in rehabilitation centres have not been effective in Nigeria. Most landscape elements are used for their aesthetic value neglecting its ability to aid patients recovery, hence, the use of healing gardens are completely absent. This is not in accordance with Green (2012) assertion which says landscape when properly incorporated in building designs can promote mental and physical wellbeing of their occupants.

CONCLUSION

The study sets to assess the use of therapeutic elements as a treatment method in drug rehabilitation centres. The study concluded that plants are the basic natural elements used while artificial elements such as walkways and fences are the dominant.

Also, the study concluded that therapeutic effect of landscape elements have not been fully tapped in Nigeria because such elements are either

completely absent or those present are basically for aesthetic functions. These are also evident in the lack of therapeutic gardens and healing waters.

The study further recommends that designs of rehabilitation centre should incorporate the use of therapeutic landscape elements right from the design inception. Also, the use of more landscape elements should be considered and they should be placed in the right proportion. The use of water therapy should be considered in future designs because of their aesthetic and therapeutic effects.

REFERENCES

- Abdulahi, Z. (2009). Drug abuse among youths: Strategies for School Counselling. *The Nigerian Society of Educational Psychologists, Jos: Nigeria*. pp. 131-136.
- Akannam, T. (2008). *North-West Rank Highest in Drug Addiction. Nigerian Drug Statistics by Zone*. Retrieved July 5, 2018 from <http://www.nairaland.com/203955/nigerian-drug-statistics-zone>
- Edwards, P. (2007). Rehabilitation nursing: past, present, and future. In K.L. Mauk (Ed.). *The specialty practice of rehabilitation nursing: A core curriculum*. Glenview, IL: ARN.
- Falk, J. H., and Balling, J. D. (2010). Evolutionary influence on human landscape reference. *Environ.Behav.*42:479.doi:10.1177/0013916509341244
- Faloo O. Olutola (2012) *Drug Addiction and Rehabilitation in Nigeria: Insights from Sociological Theories*.
- Frumkin, H., 2001. Beyond toxicity: *human health and the natural environment*. *Am.J. Prev. Med.* 20, 234–240.
- Gender, A. (1998). Scope of Rehabilitation Nursing. In P. A. Chin, D. Finocchiaro, & A. Rosebrough (Eds.), *Rehabilitation nursing practice (3-20)*. New York: McGraw-Hill.
- Gesler, W., 1992. *Therapeutic landscapes:medical issues in light of the new cultural geography*. *Soc. Sci. Med.* 34, 735–746.
- Gesler, W., 1998. *Bath's Reputation as a Healing Place*. In: R.A. Kearns, R., Gesler, W. (Eds.), *Putting Health into Place*, pp. 17-35.
- Gillis, A. and Gatersleben, B. (2015). A Review of Psychological Literature on the Health and Wellbeing Benefits of Biophilic Design. *Buildings*, 5(3), 948-963; doi:10.3390/buildings5030948.
- Green J, (2012). *Back to nature for good:Using biophilic design and attention restoration theory to improve well-being and focus in the workplace*. Retrieved March 12, 2017 from <https://conservancy.umn.edu>.
- Kearns, R., Joseph, A., 1993. *Space in its place: developing the link in medical geography*.*Soc. Sci. Med.* 37, 711–717.
- Maller, C., Townsend, M., Pryor, A., Brown, P., Leger, L., 2006. *Healthy nature healthy people: 'contact with nature' as an upstream health promotion intervention for populations*. *HealthPromot. Int.* 21, 45–54.
- Parry, C., Rehm, J., Poznyak, V., and Room, R. (2009). Alcohol and infectious diseases: An overlooked causal linkage? *Addiction*, 104(3), 331-332.
- Remsburg, R., and Carson, B. (2006). *Rehabilitation*. In I. Lubkin & P. Larsen (Eds.), *Chronic illness: Impact and interventions (579-616)*. Sudbury, MA: Jones and Bartlett Publishers.
- Thurber, C.A., Malinowski, J.C., 1999. *Environmental correlates of negative emotions in children*. *Environ. Behav.* 31, 487–513.
- Tupper, K.W. (2012). *Psychoactive substances and the English language: Drugs, discourses, and public policy*. *Contemporary Drug Problems*.
- United Nations International Drug Programme (1997). *World Drug report Oxford, United Nations International Drug Control Programme*.
- United Nations Office on Drugs and Crime. (2017). *Drug Abuse and Drug Dependence Treatment Situation, in Nigeria*. According to UNODC data for the year 2007. Retrieved July 5, 2018 from http://www.unodc.org/docs/treatment/CoPro/Web_Nigeria.pdf

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Williams, A., 2007. *Therapeutic Landscapes*. Ashgate, London.

Yeo, H. (2000) *Mycoinsecticides for aphid management: A biorational approach*. PhD thesis University of Nottingham, Nottingham, UK.

Yin, R. K. (2003) Case Study Research: Design and Methods. *Applied Social Research Methods Series*, Sage Publications, Thousand Oaks, London, 5 (3), 23- 32.