

## Visual Arts as Alternative Therapy to Parkinson Disease

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### Abstract

The population of elderly people facing Parkinson disease in Nigeria is on the increase such that it requires an alternative solution. The study examined the use of visual art as an alternative therapy to Parkinson disease and specifically it identified the socio-economic characteristics of respondents with the disease and determined the causes. The risk factors of the disease were also identified with the symptoms. The study determined the effects of visual art therapy on the ailment. A purposive sampling technique was employed to select respondents who are affected by the progressive nervous system disorder from the University college hospital, Ibadan, Nigeria. A total number of 30 respondents were selected as the control and 30 respondents as experimental and data was obtained with the use of a structured questionnaire. Findings revealed that young adult rarely experience the disease but between the age of 50 years and above. Men (85.5%) develop the disease than women and the

major cause is unknown but genes and environmental factor triggers the occurrence and the major risk factors are age, exposure to toxins and heredity while the major symptoms are thinking difficulties. The practice of painting can serve as an alternative therapy to Parkinson disease which will improve individual imaginative skills, boost self-expression, relax muscles and improve flow in the mind and body connection. The experimental group in visual art therapy had a greater decrease of emotion, stress and somatic symptoms than the control group and lower level of depression was recorded. Alternative therapy of Art to Parkinson disease provides sophisticated neurologic mechanisms including patients' recognition of creative expression to value individuality promote memories, eye and hand coordination, motor skills and expand their overall aesthetic experience to enhance self-confidence, relaxation and self-awareness.

**Keywords:** Alternative Therapy, Parkinson Disease, Visual Arts

### Introduction

The creative process involved in expressing one's self artistically can help people to resolve issues as well as

develop and manage their behaviors and feelings, reduce stress, and improve self-esteem and awareness. Health issues require alternative treatments to relieve the burden of orthodox that rely solely on administration of medicine. The use of medicine has

been used to treat various illness but oftentimes becomes complicated when the sickness keep reoccurring. The alternative therapy is used in place of standard medical care. However, the use of alternative practices includes homeopathy, traditional medicine, chiropractic, acupuncture, and art therapy (Flaherty, 2005). Painting as a product of therapeutic value has been an age long activities which has been used as an alternative ways of communicating and expressing emotions. Using painting as an outlet for emotional burdens and inner feelings can allow audience to open up another side of relieve that can reduce stress levels and improve anxiety (Abodunrin, 2018). Painting which is an organ of visual art and it has been used to perform several functions over the ages. The function ranges from psychological relief, emotions stabilities, aesthetics value, and other several therapeutic functions as been ascribed to the practice and exposition to the form of visual art. Painting is an important form in the visual arts, bringing in elements such as drawing, gesture (as in gestural painting), composition, narration (as in narrative art), or abstraction (as in abstract art). Paintings can be naturalistic and representational (as in a still life or landscape painting), it can also be symbolic in the representation of different subject matter.

Illness such as Parkinson disease (PD) is a long-term degenerative disorder of the central nervous system that mainly affects the brain. It often starts gradually with a tremor in one hand, and later with symbols of slow movement, stiffness and loss of balance (Cucca, 2018). The practice of painting can serve as an alternative therapy to Parkinson disease which will improve individual imaginative skills, boost self-expression, relax muscles and improve flow in the mind and body connection. The study examined the use of visual art as an alternative therapy to Parkinson disease and

specifically it identified the socio-economic characteristics of respondents with the disease and determined the causes. The risk factors of the disease were also identified with the signs. The study determined the effects of visual art therapy on the ailment. A purposive sampling technique was employed to select respondents who are affected by the progressive nervous system disorder from the University college hospital, Ibadan, Nigeria. A total number of 30 respondents were selected as the control and 30 respondents as experimental and data was obtained was obtained with a structured questionnaire. Several alternative therapy have been on homeopathy, traditional medicine, chiropractic, acupuncture, and art therapy, the use of painting as an alternative treatment specifically for Parkinson disease has received little attention, the gap which study filled.

### Visual Arts and Parkinson's disease: An Overview

Visual art is any creative work whose products can be appreciated by sight such as painting, drawing, printmaking, sculpture, ceramics, photography, video, filmmaking, design, crafts, and architecture (Getlein, 2002). Arts transmit emotions and feelings which can affect audience psychologically through senses. It is widely thought that the capacity of artworks to arouse emotions in audiences is a perfectly natural and unproblematic fact. It just seems obvious that we can feel sadness or pity for fictional characters, fear at the movie screen, and joy upon listening to upbeat, happy songs. This may be part of the reason why many people are lovers of arts generally. Artistic expression is a wonderful and soul expanding thing for anyone, but it has a particular healing quality for anyone who wants to understand and work with empathy, because art helps you express and channel emotions intentionally.

Empathy is first and foremost an emotional skill, and learning how to work with and understand emotions is a vital part of developing healthy and intentional empathy. Certain visual arts have been used to stabilize illness like Parkinson through emotional connections to the practice.

Parkinson's disease (PD) is a long-term degenerative disorder of the central nervous system that mainly affects the brain. It is also a chronic, progressive neurodegenerative disorder with the incidence of the disease increases with age. A significant number patients, however, experience onset of symptoms at a younger age and in 5-7% of cases, the onset of symptoms occurs before the age of 40 (Koller, 1987). Parkinson's disease (PD) is the second most common neurodegenerative disorder after Alzheimer dementia, affecting approximately one million people in the United State, with about 60,000 additional patients newly diagnosed every year (DcMaagd, 2015)

In general, pharmacotherapy may provide good control of motor symptoms early in the course of the disease, but prolonged use of medications and dose escalation eventually limit their tolerability. Furthermore, many non-motor symptoms, including fatigue, apathy, and visuospatial dysfunction, persist despite medication; progressively imp acting quality of life (Rana, 2015). Considering the pervasive, combined impact of both motor and non-motor symptoms during the disease course, effective and compassionate treatments require comprehensive, multi-displinary approaches involving physical therapy, occupational therapy, psychological support, family counseling, and palliative care (Prizer, 2012).

Visual art practice stands as one of the physical, occupational, and psychological therapy that involves manipulating certain part of the body for gradual corrective measure. Painting as an organ of visual art can generate capacity as an alternative therapy for Parkinson disease.

### **Painting: An Alternative Therapy for Parkinson Disease**

Painting is an aspect of the visual Art with numerous forms. Form is generally used to describe the appearance of an object or structure of an object. Using painting as an alternative therapy require looking at the intrinsic value associated with painting, which entails emotional and psychological contents. In psychology of painting, the relationship between emotion and therapy has newly been the subject of extensive study. Emotional or aesthetic responses to painting have previously been viewed as basic stimulus responses responsible for psychological and emotional stability of an individual. Engaging painting as an alternative therapy for treating illness such as Parkinson disease (PD) will promote self-expression and boost confidence, muscles become relaxed when engaging in the practice of painting which later brings stability to the patients. It also improves the flow and body connection in the mind of patients when they are connected psychologically. Artists' eye and hand coordination is possible which can improve the memory and the general psyche of patients with PD.

Self-expression in painting is a way of communicating through form and colors to express various emotional situation of the artist such as anger, passion, and sometimes loneliness. However, therapeutic communication through painting focuses on advancing the physical and emotional well-being of a patient.

Situation of the patient with PD gets improved when he or she expresses his thought through visual communication that is geared towards mental alertness to external stimuli.

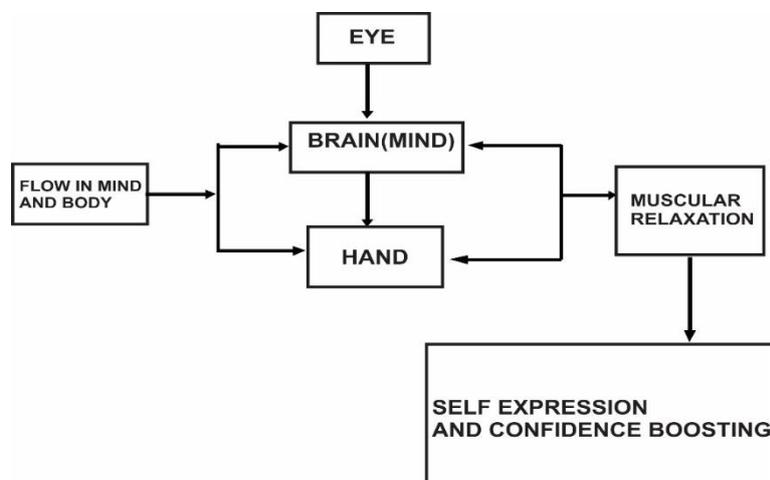
Muscle relaxation as a result of practicing painting is when the body and mind are free from tension and anxiety. It is a form of mild ecstasy and can be achieved through meditation and progressive muscle relaxation. Relaxation helps to improve coping with stress which causes physical problems and can affect the nervous system and our health. So when patients with PD sees or practice painting it puts them in the frame of mind to relax and enjoy life. Painting improves the flow of the mind and body connection in such a way that human body is where your consciousness flows seamlessly through all parts of your being, influencing every aspect of what we feel and perceive. Artistic consciousness alerts the mind and engages the body for possible therapeutic solution to PD cases as it enables body movement and exercises. This is explained in the visual art therapeutic model below.

### Visual Art Therapeutic Model

The eye, mind and hand coordination affects our ability to colour perception, drawing skills and manipulation of art materials and techniques of execution which require the use of all sensory organs. The visual therapeutic model below shows hand-eye coordination in visual arts, the process is the ability to do activities that require the simultaneous use of our hands and eyes, like an activity that uses the information our eyes perceive (visual spatial perception) to guide our hands to carry out a movement which can serve as recreational activities that are therapeutic. Eye-Hand coordination is a complex cognitive ability, as it calls for us to unite our visual and

motor skills, allowing for the hand to be guided by the visual stimulation our eyes receive. Painting involve looking or imagine (inner eye) at the subject matter, allow the brain and the mind to process it in terms of emotional urge before the personal expression through the manipulation of different brushes effects and colour. In the process, complex coordination between the eye, mind and the hand is necessary to actualize self-expression and confidence booting in visual arts.

Visual motor skills of PD patients who engage in the practice of painting in particular, have the chance of bringing his eye and mind into alertness. Strength, coordination and range of motion may be sufficient. Thus, the deficit is often in the mechanism that enables the visual and the motor systems to work together. In all, paintings represent the mindset, mood, skills, and preoccupations of a painter. Although creativity can be expressed in virtually any domain, painting, in particular, illustrates how creativity may be modulated by normal or pathological brain functions. The effects of neurodegenerative disease on artistic expression may vary depending on the extent of cognitive, behavioral and motor dysfunction as Illustrated below.



Source: Author's Model

**Results and Discussions**

**Socio- economic characteristics**

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The results of findings in table 1 below, reveals the socio-economic characteristics of the respondents with Parkinson Disease. 93.4% of the respondents affected by PD were 50 years and above and were all married. Also, 86.7% of them were male and mostly civil servants with tertiary education with the mean age of 5 years on the illness. This implies that majority of the people affected by PD are middle aged married men who may have gone through hectic and rigorous productive activities in their youthful days to meet up with household demands and marital expectations.

Ageing remains the biggest risk factor for developing PD. Aging is characterized by a progressive decline of many physiological functions, an increased susceptibility to certain diseases and an increase in the likelihood of death. Although PD is thought of as a disease of old age, a small percentage of patients (6.6%) present with symptoms before the age of 50 years. However, the study reviews the evidence that ageing is important for the development of Parkinson’s disease. This finding suggests that normal aging is associated with a loss of neurons and with a loss of function in the body capacity of patients

Source: Author’s Survey, 2019.

Sec Age	f	%
21-30	0	0
31-40	0	0
41-50	2	6.6
>50	28	93.4

Table 1: Distribution by Age

**Causes of PD**

It was revealed in table 2 that the major cause of PD is unknown (93.3) but genes (66.6%) and environmental

factors were also identified as likely causes of PD. As much as we know that the cause PD is unknown, however, hygienic environment has been proven to reduce cases of the disease. Human body over the time is exposed to carcinogenic substances everyday due to the type of environment we live in (plastic in ocean, oil spillage, land pollution, air pollution, acid rain etc). The implication of this is that everybody at certain age grade will certainly experience the symptoms of PD and it can only be managed through medications. Occasionally, doctors may suggest surgery to regulate certain regions of the brain. It has not been fully established the genetic factors responsible for the cause of the disease. The result below has also indicated that genetic factors are associated with the cause of PD (66.6%). This means that part, or all of the risk, is passed down from one’s parents who are now become generationally.

Source: Author’s Survey, 2019

Cause	F	%
Unknown	28	93.3
Genes	20	66.6
Environmental factor	15	50.0

Table 2: Distribution by Causes of PD

**Risk Factors**

From the table 3 below, the major risk factor identified was age (60%). Others were exposure to toxins (33.3%) and heredity (10%). This implies that older we age, the more the tendencies of having PD. The study has shown that gender, age, race, and genetic factors contribute to the risk factor of the disease. Ageing remains the biggest risk factor for developing PD. Aging is characterized by a progressive decline of many physiological functions, an increased susceptibility to certain diseases, and an increase in the likelihood of death. Exposure to certain chemicals has been associated with Parkinsonism, but no consistent association has been made between exposure to any

particular chemical and the prevalence or incidence of idiopathic PD.

Source: Author’s Survey, 2019

Factors	F	%
Age	18	60.0
Exposure to toxins	10	33.3
Heredity	3	10

Table 3: Distribution by Risk Factors

### Alternative therapy of Visual Arts

The use of visual art as an alternative therapy to PD table 4 has helped in individual value improvement (100%), self-expression/confidence boosting (100%) and muscular relaxation (100%). Others were improved flow in mind and body connection (93.3%), eye and hand coordination (83.3%) and memory promotion (66.6%). This inferred that situation of the patient with PD gets improve when he or she expresses his thought through visual communication that is geared towards mental alertness to external stimuli. So when patients with PD sees or practice painting it puts them in the frame of mind to relax and enjoy life. Painting improves the flow of the mind and body connection in such a way that human body is where your consciousness flows seamlessly through all parts of your being, influencing every aspect of what we feel and perceive. Artistic consciousness alerts the mind and engages the body for possible therapeutic solution to PD cases as it enables body movement and exercises. Visual motor skills of PD patients who engage in the practice of painting in particular, have the chance of bringing his eye and mind into alertness. Strength, coordination and range of motion may be sufficient. Thus, the deficit is often in the mechanism that enables the visual and the motor systems to work together.

Source: Author’s Survey, 2019

Visual art therapy	F	%
Improved individual value	30	100
Self-expression/confidence boosting	30	100
Eye/hand	25	83.3
Muscular relaxation	30	100
Improved flow in mind and body connection	28	93.3
Memory promotion	20	66.6

Table 4: Distribution by alternative therapy of Visual Arts

### Conclusion

The study revealed that there is Parkinson disease in Nigeria and it is more prevalent among the elderly person of fifty years (50) and above. Visual arts has also been seen as an alternative therapy for managing Parkinson disease through visual expression and boosting, muscular relaxation, improve flowing mind and body connection through manipulation of art materials. Imaginative compositions in painting has also enabled memory promotion and general coordination of people with PD. Eye and hand stability was derived through still-life studies which enable the patient to make eye recording that was transmitted to the brain and manipulated by the hand. All these processes serve as complementary therapeutic strategies potential, striving towards the restoration of functional independence and maintenance of quality of life. Although creativity can be expressed in virtually any domain, painting, in particular, illustrates how creativity may be modulated by normal or pathological brain functions. The effects of neurodegenerative disease on artistic expression may vary depending on the extent of cognitive, behavioral, and motor dysfunction.

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