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**SPORTS
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& Mental Health**



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Danladi Musa & Ademola O. Abass

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Editorial

Research evidence abounds in recent time on the need for physical activity as an adjunct tool in the management of mental illness. Individuals with serious mental illness are at high risk of chronic diseases associated with sedentary behavior, including diabetes and cardiovascular disease. The effects of lifestyle modification on chronic disease outcomes are large and consistent across multiple studies. However, physical activity and exercise have also been found to alleviate basic symptoms and also secondary symptoms of mental illness such as low self-esteem and social withdrawal. Today's researches suggest that exercise is well accepted by people with serious mental illness and is often considered one of the most valued components of treatment. Adherence to physical activity interventions appears comparable to that in the general population. It has also been proved that mental health service providers can provide effective, evidence-based physical activity interventions for individuals with serious mental illness when properly guided.

The theme for the 2012 annual conference of our great Association was chosen based on the above convictions. It is pertinent to note that the success of the conference was made possible by the positive contributions of the Management and staff of the Neuropsychiatric Hospital, Aro, Abeokuta, who hosted the conference. Most of the papers published in this edition of the Journal of Sports Science and Medicine were targeted at the various issues on Physical activity and Mental Health. The editorial team appreciates all members and contributors for your unflinching support in sustaining the legacies of our great association.

Prof. Danladi Musa.

Dr. A.O. Abass

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GUIDELINES FOR AUTHORS

The Journal of Nigeria Association of Sports Science and Medicine is the official publication of the Nigeria Association of Sports Science and Medicine. A blind review process is rigorously followed. Normally, authors submitting manuscripts are expected to be currently registered members of NASSM. Manuscripts from non-members are also considered by the editor for review.

The following guidelines are to assist authors in preparing manuscripts to be submitted and considered through review and editorial processes.

Language

- Submit all manuscripts in English

Topic

- Subject matter from all areas of health, physical education, recreation, sport, and interpreted in the broadest manner possible.
- Report of research studies or project should include a section on practical implications of the study or project.

Manuscript Preparation

- Use APA format being sure it is employed consistently throughout the manuscripts.
- All manuscripts must be computer generated, double spaced, with 1" margins, and numbered.
- Incorrectly prepared manuscripts will be returned without review to corresponding author.
- Prepare a title page containing each author's name, position, affiliation, address and telephone numbers, and e-mail address. This is the only page where identifying information is to appear.
- For multiple authorship, identify which author should receive correspondence from the editor.
- Follow the title page with the abstract, and then the full content of the manuscript. These pages should contain information identifying the author(s).
- Try to make the manuscript no longer than 8 to 12 double-spaced pages - these make the most appropriate length articles.
- Include an abstract of between 100 and 200 words. The abstract should be a succinct summary of the information presented in the article.
- Receipt of manuscript is acknowledged to corresponding author by editor.

Submission Process

- Submit relevant pictures to give greater impact to your manuscript - black and white preferred although clear color prints, slides, and digital pictures can be used.
- Submit three computer generated double-spaced copies of your manuscript and abstract (one copy of each), manuscript and abstract on a virus-free floppy computer diskette in Microsoft Word Format. If possible, also send a material in the form of an e-mail attachment (Ms-Word Format).
- Corresponding author is notified of status of manuscript as soon as recommendations are received from reviewers. This process may take longer than might be expected since reviewers are busy throughout the world.
- Order of manuscript acceptance and publication is not the same since many factors are considered for each issue.
- Lead author receives two copies of the issue in which his/her article is published.
- Send manuscripts and direct any correspondence to the attention of the Managing Editor.

Dept. of Human Kinetics and Health Education, University of Ibadan
(Adapted from ICHPER.SD Journal)

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EXERCISE AS A MEDICINE IN THE MANAGEMENT OF MILD MENTAL HEALTH DISORDERS

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Abstract

Exercise has been known over the years to be of great value to physical health and the promotion of sound mental health. Exercise is seen as a medicine that prevents health problems and serves as therapeutic measure in the rehabilitation of patients with varying degrees of disease conditions. The use of exercise prescription as the best alternative to health problems has attracted more collaborative research work in medical practice. However, there seems to be challenges in the optimal utilization of exercise prescription in the management of mild mental health disorders (MMMHD). The purpose of this study is to determine whether psychiatry workers have any qualification in exercise prescription; their perception of the benefits of exercise and to evaluate the extent of exercise utilization in the management of mild mental health disorders. The population of study is medical practitioners in Lagos and Ogun States. Purposive sampling technique was adopted in drawing up sample for the study. The respondents comprise 22 psychiatry workers which include clinical psychologist, Fitness Instructors, Mental Health Nurses and social workers. The findings of the study show that most respondents do not possess any qualification in exercise prescription but do believe that exercise has great benefits and

therefore they prescribe it to patients with mental health problems. Training of psychiatry workers and the optimal utilization of exercise in the management of mild mental health disorders were recommended.

Key Words: Exercise, Mild Mental Health Disorder, Prescription and Management

Introduction

Physical activity is now widely accepted among health and medical authorities as one of the important factors in healthy living. Furthermore, exercise is considered as one of the best options in the management of mild mental health problems such as anxiety and depression. (Bingham, 2012; Landers, 2006) The use of exercise as a medicine instead of drug administration requires designing a regimen of physical activity in a systemic and individual manner. It is the successful integration of the science of exercise physiology and behaviour change principles that results in long-term compliance to a physical activity regimen (American College of Sports Medicine (ACSM, 2000). Physical activity is an umbrella term describing any bodily movement produced by the skeletal muscles that result in energy expenditure.

Exercise is a subset of physical activity which is volitional, planned, structured, repetitive and aimed at improvement or maintenance of an aspect of fitness or health. The benefits of participating in prescribed exercise programme are innumerable (Otinwa, 2010). When exercise is done regularly it helps people to live long and prevents stroke, hypertension, obesity, osteoporosis, **diabetes, musculo-skeletal problems**, certain kinds of cancer, mental tension and depression. It increases self-confidence, positive attitude and positive feeling of success and enjoyment of leisure time and work. Corroborating these benefits, Gever (2010) affirmed that regular exercise can help prevent the cognitive and physical impairments of aging that many people dread more than death.

It is for all these health benefits, and more, that people should participate in any form of exercise. However, it has been observed that many individuals do not engage in physical exercise because of environmental factors, bad roads, traffic congestion, insecurity, extreme weather conditions, general stress, socio-economic status and poor electricity supply. These factors are either directly or indirectly responsible for the onset or predisposition to either mild or severe mental health disorders, otherwise self managed by victims which some have reported to medical practitioners. This condition is not peculiar to Nigerians. In developed countries of the world, mental health disorders are common. It is against this background that this study seeks to

evaluate the qualification of experts in exercise recommendation, determine whether medical practitioners prescribe exercise as a treatment mode for mild mental disorder and their perceived benefits of exercise in its prevention.

Methods

The population for this study is made up of medical practitioners in psychiatry. Purposive sampling technique was adopted in the study because of convenience. The total sample size was 22, comprising 2 clinical psychologist, 2 Fitness Instructors, 8 Mental Health Nurses, Psychiatrists and 3 social workers. The instrument for data collection was questionnaire which was classified into 3 categories: section one dealt with demographics of medical practitioners, section two elicited responses on the perceived benefits of exercise in the treatment of mild mental health disorders, while the last section addressed issues on certification in exercise prescription. Descriptive statistics were used in the analysis of result.

Result

Results were analyzed using frequency counts and percentages and have been presented in tables and graphical illustrations.

Table 1: Frequency Distribution of Respondents' by Age

Age	Freq	Percent
20-29	7	36.84
30-39	3	15.79
40-49	7	36.84
50-59	2	10.53
Total	19	100

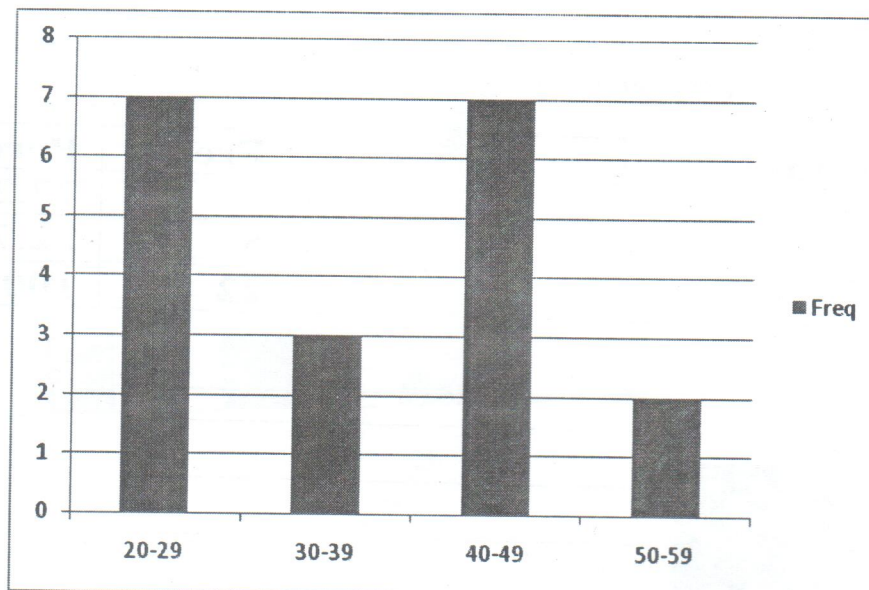


Figure 1: Bar Chart showing the Age Distribution of Respondents

The age distribution of respondents shows that majority are young workers while the second large group falls within the middle age bracket. However, two respondents did not indicate their age in the questionnaire. Age analysis showed a positively skewed distribution.

Table 2: Distribution of Respondents' by Sex

Sex	Freq	Percent
Female	9	40.91
Male	13	59.09
Total	22	100

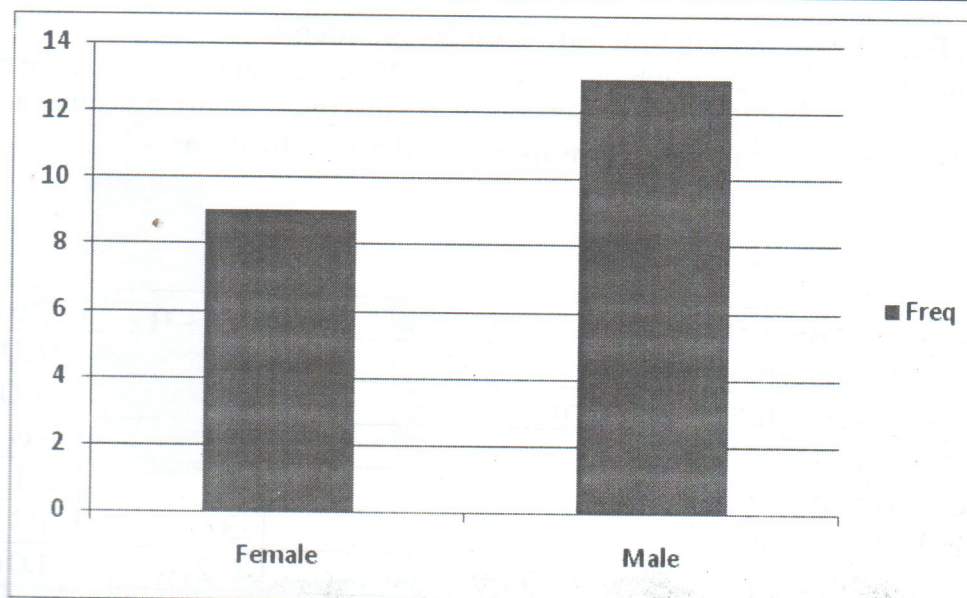


Figure 2: Bar Chart showing the Sex Distribution of Respondents

The sex distribution of the respondents indicates that males outweigh females in psychiatry practice in the sample drawn for study.

Table 3: Marital status of Respondents

Marital status	Freq	Percent
Married	17	77.27
Single	5	22.73
Total	22	100

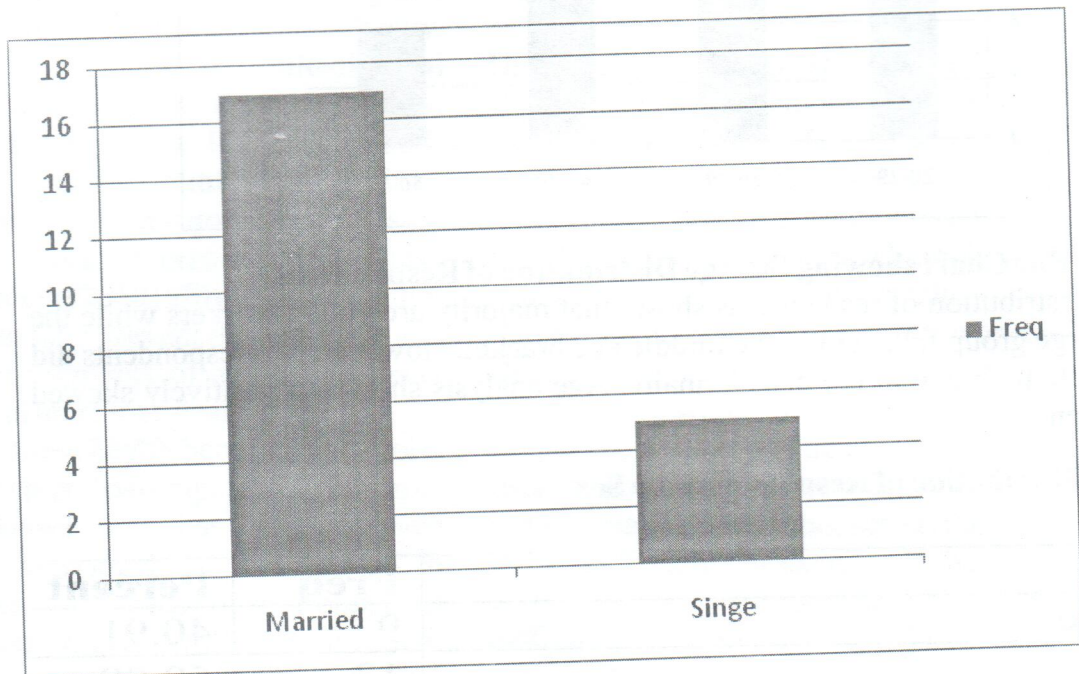


Figure 3: Bar Chart showing Marital Status Respondents

Two-thirds of the respondents which represent 77.27% were married while the rest of the respondents were single. This is probably because most respondents are young adults.

Table 4: Distribution of Respondents by Areas of Specialization

Area of Specialization	Freq	Percent
Clinical Psychologist	2	9.09
Fitness/Health Instructor	2	9.09
Mental Health Nurse	8	36.36
Psychiatrists	7	31.82
Social Worker	3	13.64
Total	22	100

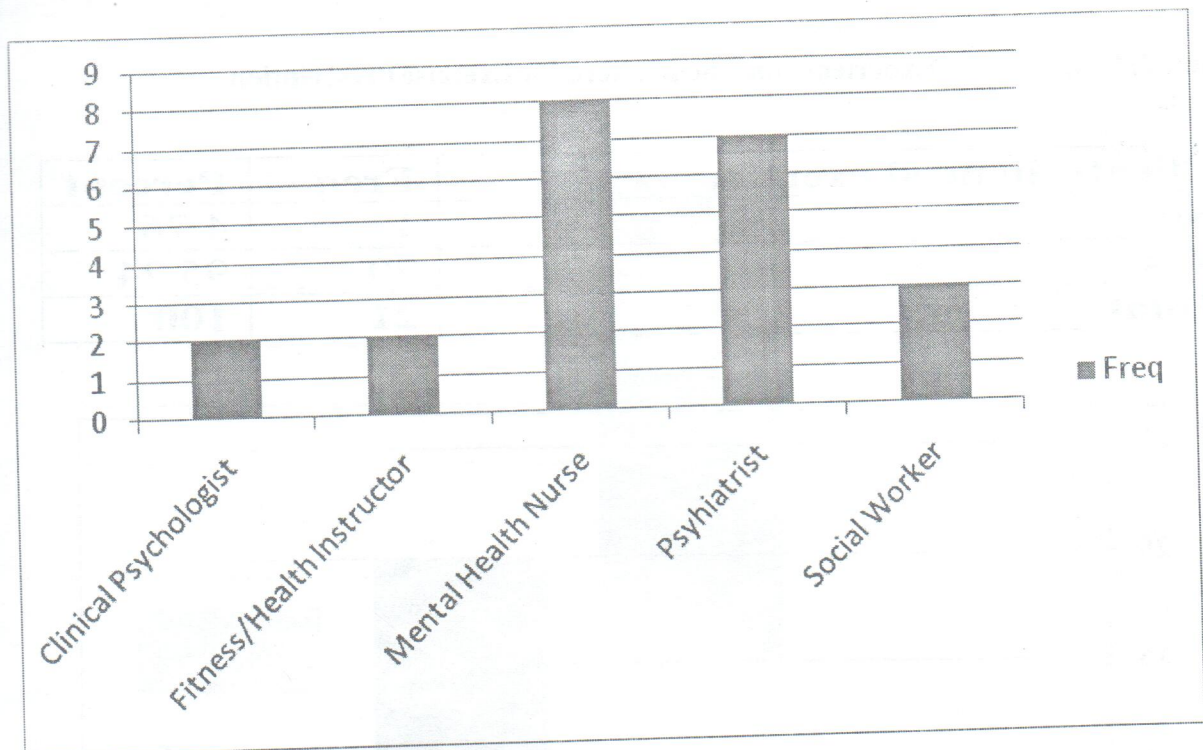


Figure 4: Bar Chart Showing Respondents by Area of Specialization
 Out of the 22 respondents, 7 were psychiatrists, 8 mental health nurses and 3 social welfare workers. There were 2 clinical psychologists and 2 fitness/health instructors.

Table 5: Respondents' Length of Practice

Years of Experience	Freq	Percent
0-9	13	59.09
10-19	7	31.82
20-29	2	9.09
Total	22	100

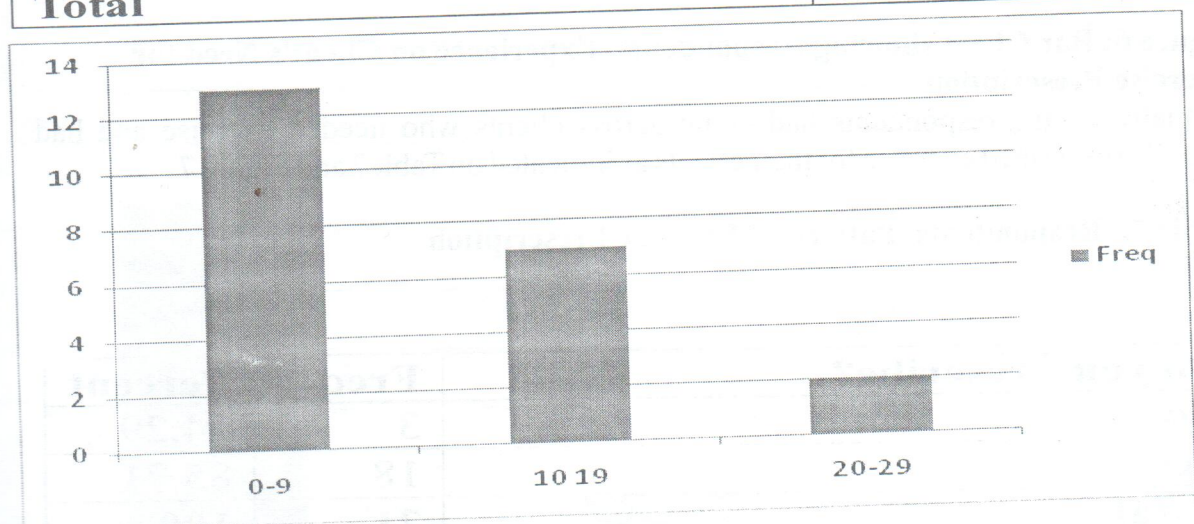


Figure 5: Bar Chart showing respondents' length of service
 The minimum duration of work experience of respondents was between 0-9 years while the highest was between 20-29. Years of experience of participants was positively skewed.

Table 6: Respondents' Experience on Client's Need for Exercise Prescription

Clients in need exercise	Freq	Percent
No	1	4.76
Yes	20	95.24
Total	21	100

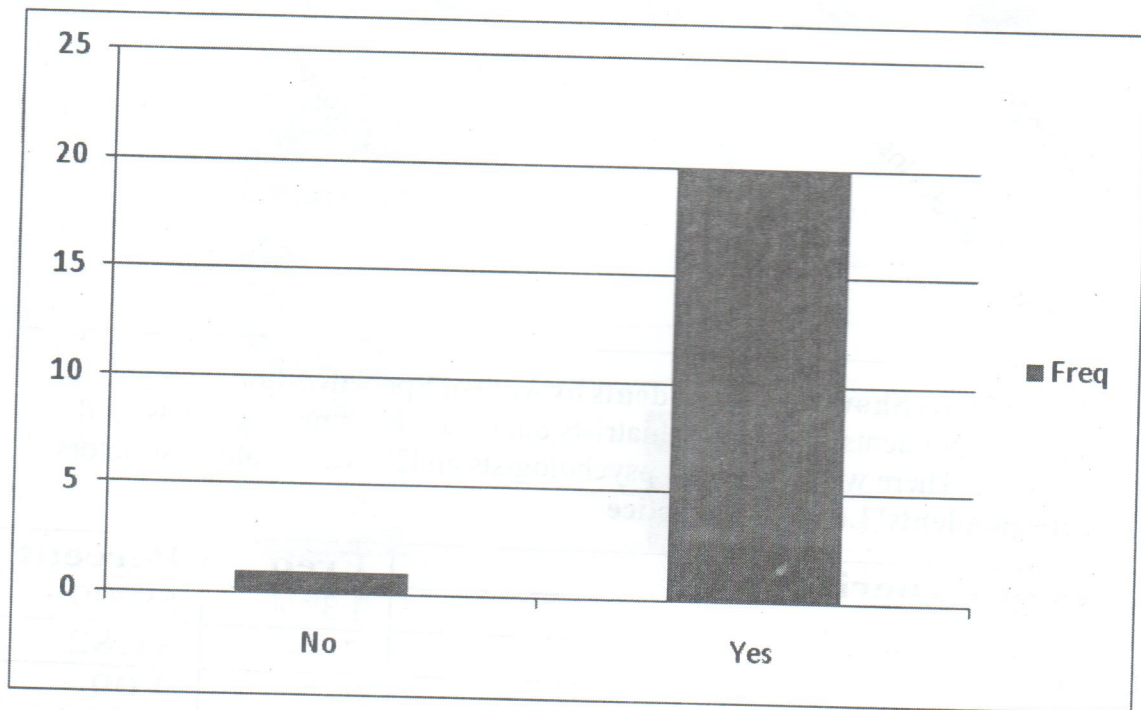


Figure 6: Bar Chart showing Respondents' Experience on Client's Need for Exercise Prescription

Virtually all the respondents had come across clients who needed exercise and had actually prescribed exercise for their clients as indicated on Table 7 and Figure 7.

Table 7: Respondents' Pattern of Exercise Prescription

Do you prescribe?	Freq	Percent
No	3	14.29
Yes	18	85.71
Total	21	100

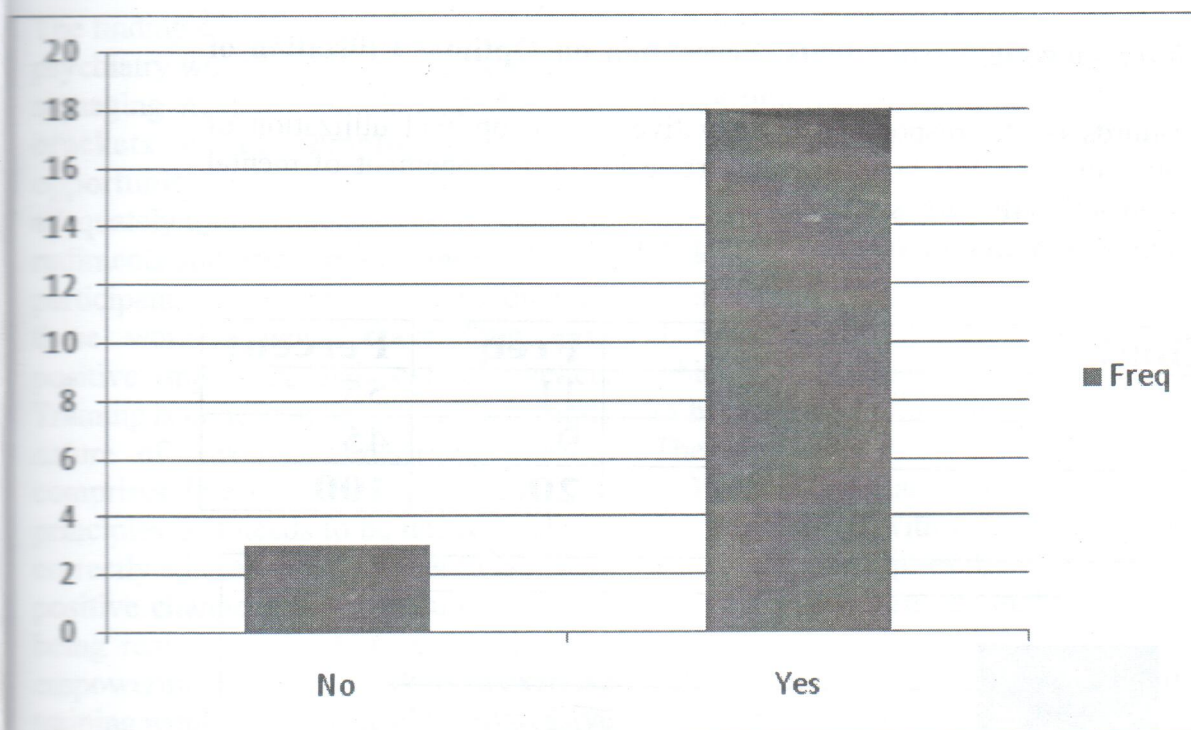


Figure 7: Bar Chart showing Respondents' Pattern of Prescription

Majority of the workers recommended exercise in the management of health disorders

Table 8: Perception on Optimal Utilization of Exercise

Benefits of exercise optimally harnessed?	Freq	Percent
No	15	75
Yes	5	25
Total	20	100

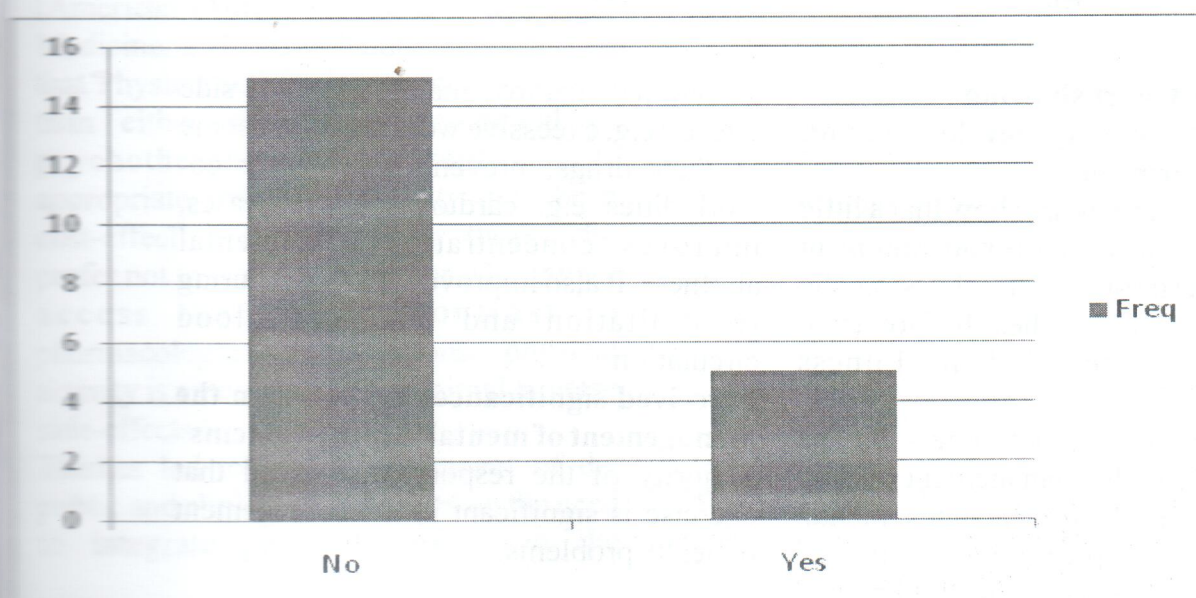


Figure 8: Bar Chart showing Respondents' Perception on Optimal Utilization of Exercise

Perception of two-thirds of the respondents is negative on the optimal utilization of exercise. This implies that the full benefits of exercise in the management of mental ailments have not been optimally harnessed.

Table 9: Capacity Development on Exercise Prescription

Any training?	Freq	Percent
No	11	55
Yes	9	45
Total	20	100

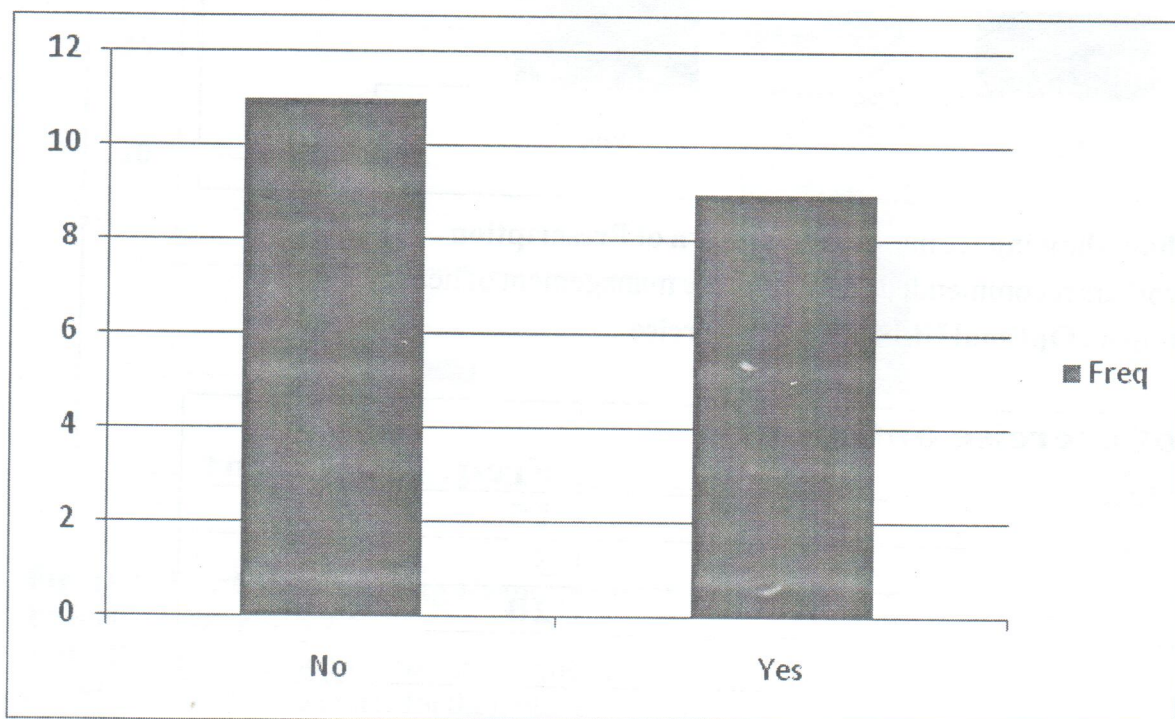


Figure 9: Bar Chart showing Respondents' Capacity Development on Exercise Prescription

The above table and figure show that a little over half of the study sample had training in exercise prescription as it relates to the management of mental health. However, they were not certified in Fitness Instruction.

Recommendation of practitioners on the use of exercise in the management of mild mental health problems includes mental health promotion, prevention of mental health disorders, treatment of mild mental problems, maintenance therapy,

diversional therapy, management of side effects (e.g. excessive weight gain) of some of their drugs, prevention of other co-morbidities e.g. cardiovascular diseases, improves concentration and mental alertness. It also improves prognosis during rehabilitation and enhances blood circulation

Perceived significance of exercise in the management of mental health problems

Majority of the respondents agreed that exercise is significant in the management of health problems.

Discussion

The finding of this study shows that young psychiatry workers have been employed in managing mentally ill patients. The age brackets of the employees provide opportunity for the employees to be adequately trained and certified in exercise rudiments and prescription, since only two participants were certified. Subsequently, these workers would have long term positive impact in their career practice. Training is important because of the unique nature of exercise prescription which comprises five essential components and principles that needs to be understood and correctly administered in order to facilitate positive change among peculiar patients being rehabilitated (Otinwa, 2011). The empowerment of these workers in exercise training would certainly lead to progressive utilization of exercise as a therapeutic measure or medicine in the management of mental health disorders.

The use of exercise prescription by Psychiatrists lend support to research findings. Literature shows that exercise has been proposed as an alternative or adjunct to traditional approaches for treating health problems. It is a therapeutic measure adopted in the rehabilitation of patients with mild mental health disorders and it has been recommended as the best prescription (American College of Sports Science and Medicine, 2012). Bingham (2009) affirmed that 'Physical activity is more cost-effective than either psychopharmacological or psychotherapeutic interventions. If appropriate, "physical activity may be a cost-effective alternative for those who prefer not to use medication or who cannot access therapy." In contrast to pharmacological interventions, physical activity is associated with minimal adverse side-effects.'

This has led to the enlightenment of the public and clinical practitioners on the need to integrate physical activity in the

treatment of many health problems. To maximize the full benefits of exercise in the rehabilitation of patients, this would require an adequate dosage in frequency, duration, intensity, mode of progression and diligent monitoring by certified exercise instructor(s).

While training is considered appropriate, there are perceived draw backs expressed which must be strategically solved in order to harness the optimal benefit of exercise. These include:

- 1) The fact that some mental disorders have to do with disorientation of the mind. It implies that there will be difficulty in ensuring exercise compliance.
- 2) Problem with follow-up of patients especially when they are large in number and few Fitness Instructors are available to monitor frequency of exercise.
- 3) The negative attitude of many health workers and their lack of interest in exercise would result in difficulties in the administration of physical activity among patients.
- 4) Lack of adequate and sufficient exercise equipment and facilities.

The research findings of Faulkner and Biddle (2001) also identified three challenges to the integration of physical activity into mental health programs:

- Mental health clinics' lack of knowledge about the therapeutic benefits of exercise
- The perceived simplicity of these programs
- An incompatibility of exercise programs with traditional treatments

The perceived draw backs could be overcome if the hospital management is

willing to have positive change and result in the way and manner that patient are treated . This would start with needs assessment, training and funding of exercise equipment and facilities.

Recommendations on the use of exercise as a preventive tool

Exercise prescription should be included in the curriculum of all the categories of mental health professionals and should be taught by exercise experts. Physical activity should be part of exercise prescription in the treatment protocol and there should be massive community education on the use of exercise as preventive tool.

Conclusion

This evaluation provides an overview of the qualification of psychiatry workers in exercise prescription, the significant benefits of exercise in the promotion and maintenance of health and its role as a treatment device for patients with mild mental health problem such as depression. Problems associated with the administration of exercise prescription were identified. Appropriate recommendations have been made to overcome the barriers to optimal utilization of exercise benefits in the management of patients.

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