

Description of physiotherapy services in a mental health institution in Nigeria

ABSTRACT: *Physiotherapy has long been recognised as adjunct to drug therapy in the management of individuals with mental illness. However, little evidence existed on the utilization of physiotherapy in mental health especially in developing worlds.*

This study reviewed the utilization of physiotherapy in a Mental Health Institution in Lagos, Nigeria and determined its contribution to quality of patient-care in the hospital.

This study involved review of clients' activity profile and patients' record in a federal neuro-psychiatric hospital in Lagos, Nigeria between 2002 and 2006. The hospital records were used as source of information for socio-demographic details. Information on the physical diagnosis was extracted from the patients' records in the departmental records. Data were summarized using descriptive statistics.

Six thousand, four hundred and seventy-three (3.3%) out of the 195,686 patients of the hospital within the study period enjoyed physiotherapy services.

Only 766 (14%) of the hospital in-patients enjoyed physiotherapy services. In addition, 808 clients enjoyed the health promotion services. Low back pain (85; 21.7%), osteo-arthritis (82; 20.9%), stroke (64; 16.3%) and shoulder pain (29; 7.4%) were the most common co-existing health problems referred for physiotherapy.

The importance of physiotherapy in mental health is evidenced in the number of patients/clients who benefited from its services. Therefore, physiotherapy is an integral and indispensable member of the mental health team. However, physiotherapy is still under-utilized in the hospital. This points to the need for proper integration of physiotherapy into mental health team in the hospital and other similar health institutions.

KEY WORDS: *PHYSIOTHERAPY SERVICE, MENTAL HEALTH TEAM, MENTAL ILLNESS, MENTAL HEALTH INSTITUTION, NIGERIA.*

INTRODUCTION

Mentally ill individuals often present with co-existing health conditions amenable to physiotherapy (Gbiri, 2007; 2011a). Poor treatment outcomes and high relapse rate have been major clinical problems confronting mental health clinicians and researchers (Longabaugh et al, 1996; Lawal et al, 1999; Nierman and Lyons, 2001; Lawal et al, 2004). However inter-disciplinary and trans-disciplinary approach reduces this menace (Gbiri et al, 2011). It has long been recognised that physiotherapy for individuals with inorganic mental illness in form of exercise therapy/training and relaxation instruction is as effective as drug without the side effects (Hare, 1986; Gbiri et al, 2011). Stress management/coping mechanisms and health promotion offered by physiotherapist are important in prevention and management of some mental illnesses

(Hare, 1986; Gbiri, 2007; 2011). However, it is unfortunate that physiotherapy is not usually part of mental health team in most of the mental health institutions in Nigeria and Africa (Gbiri, 2007; 2011). Physiotherapy is not often utilized for individual with mental illnesses in Nigeria hospitals. There are 35 health institutions with mental health facilities in Nigeria. However, only two not have physiotherapist in their mental-health team.

The Federal Neuro-Psychiatric Hospital, Lagos was the first to integrate physiotherapy into its mental health team in Nigeria. The services include health promotion, management of comorbid health conditions amenable to physiotherapy, mental illness prevention and prevention of complication of drug therapy. Establishment of physiotherapy within the mental health institution has made the treatment of the patients who

were hitherto referred to hospitals with physiotherapy services less cumbersome. This has made communication and team approach to patient care possible. The in-patients participate in physical exercises/training either as a form of treatment or as diversional therapy. Obesity and body weight increase are often one of the common complications of anti-psychotic drugs (Gbiri, 2011). Patients require physiotherapy to reduce the resultant accumulated weight and maintain ideal weight. Physical exercises

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are also used to reduce stress, inactivity and boredom in patients with mental illness, and increase cardio-pulmonary fitness and mental alertness. Exercises are also used to engage the drug abuse patient and also as an anti-craving modality. However, exercise therapy has not been well utilized for patients in this hospital. This may partly due to the fact that decision to participate in exercise therapy is either left on the interest of the patient, who does not know its benefits or in the hands of the nurses' in-charge who may not have had enough knowledge on the effects and benefits of exercise therapy in mental illness.

The clients in the hospital are those that come for health promotion, stress management and prevention of mental illness. They participate in stress management and health promotion sessions to prevent occurrence/resurgence or emergence of mental health disorder. Various exercises, massage and relaxation are designed to meet the individual need. It has long been realised that some of the skills that the physiotherapist has to offer in the areas of exercise therapy and relaxation instruction are as effective as drug without the commonly observed side effects (Hare, 1986; Gbiri, 2007; 2011). Diversional therapy in form

of exercises and games are common phenomena in the management of individual with mental illness in the hospital. This has not also been well utilized in this hospital. This may due to the fact that physiotherapists do not often contribute to decision making during admission of new patients. Individualized physical exercises may reduce the effect of loneliness in depressed individual when taken routinely and meticulously (Gbiri, 2007; 2011). This is usually programmed for the period when the activity of the patient is low. It may also be taken concurrently with chemotherapy. These exercises are always of low intensity, low frequency with mild to moderate duration depending on individual's need and capability.

Despite the various assumed benefits of physiotherapy to either prevent or ameliorate health problems in mentally ill individuals, there is dearth of literature on the contribution of physiotherapy to mental health both in Nigeria and other parts of the world. Therefore, this study examined physiotherapy services and determined its contribution to quality of patient-care in the Federal Neuro-Psychiatric Hospital, Yaba, Lagos, Nigeria between January 2002 and December 2006.

METHOD

The study was approved by the Ethical Committee of Federal Neuro-Psychiatric Hospital, Yaba, Lagos, Nigeria. A list of all patients who were attended to in Federal Neuro-Psychiatric Hospital, Yaba, Lagos, Nigeria between January 2002 and December 2006 was compiled from the central hospital registers and the physiotherapy department patients' register. The hospital file of each patient within the study period was thoroughly reviewed to obtain demographic information (gender and age) and details about the diagnosis. The files of patients who were not properly registered were excluded. The patients were then subdivided on the basis of in-patients and out-patients. Bio-data of the patients' were extracted from the records in the central hospital register. The information of whether they were referred for physiotherapy was also extracted. Then the information on those who were referred for physiotherapy was then compared with the physiotherapy departmental patients' record for those that actually received physiotherapy services. Data was summarised using frequency and percentage.

Table 1: In-Patient and Out-Patient Attendance for Physiotherapy Services between January 2002 and December 2006

Year	Age (Years)	IN-PATIENTS					OUT-PATIENTS					GROUND TOTAL
		Male	% Male	Female	% Female	TOTAL	Male	% Male	Female	% Female	TOTAL	
2002	≤ 19	2	50.0	2	50.0	4	___	___	___	___	___	4
	≥ 20	36.6	45	45	63.4	71	723	72.2	279	27.8	1002	1073
2003	≤ 19	5	71.4	2	29.6	7	___	___	___	___	___	7
	≥ 20	40	58.8	28	41.2	68	746	67.6	351	32.4	1097	1145
2004	≤ 19	11	78.6	3	21.4	14	___	___	___	___	___	14
	≥ 20	29	48.3	31	51.7	60	565	56.9	428	43.1	993	1558
2005	≤ 19	7	70.0	3	30.0	10	___	___	___	___	___	10
	≥ 20	20	51.3	19	48.7	39	789	70.9	324	29.1	1113	1902
2006	≤ 19	7	58.3	5	41.7	12	___	___	___	___	___	7
	≥ 20	28	66.7	14	33.2	42	764	62.8	452	37.8	1216	1980
TOTAL		155	50.5	152	49.5	307	3587	66.2	1834	33.8	4421	7928

Table 2: Attendance at the Stress Management and Health Promotion Clinics between January 2002 and December 2006

Year	Age Group	Male	% Male	Female	% Female	TOTAL
2002	≤ 19	—	—	—	—	—
	≥ 20	95	41.5	134	58.5	229
2003	≤ 19	—	—	—	—	—
	≥ 20	89	41.8	124	58.2	213
2004	≤ 19	—	—	—	—	—
	≥ 20	70	43.5	91	56.5	161
2005	≤ 19	—	—	—	—	—
	≥ 20	52	43.0	69	57.0	121
2006	≤ 19	—	—	—	—	—
	≥ 20	38	45.2	46	54.8	84
TOTAL		344	42.6	464	57.4	808

Table 3: Co-Morbid Conditions for which Individuals with Mental Illness are referred for Physiotherapy Services in the Hospital

Condition	2002	2003	2004	2005	2006	TOTAL
Low back pain	15	15	14	9	11	64
Stroke	7	7	13	9	14	50
Neuropathy	—	1	—	—	—	1
Knee(s) Arthritis	18	19	13	10	5	65
Hand Injuries	1	1	4	2	3	11
Nerve Injuries	—	4	—	—	—	4
Ankle/Foot Injuries	1	2	—	—	—	3
Faecal Incontinence	1	1	—	—	—	2
Monoparesis	3	—	—	—	1	4
Shoulder Pain	7	3	4	4	6	24
Paraplegia/paresis	2	3	—	2	—	7
Quadriplegia/paresis	4	4	—	1	—	9
Incoordination	—	1	—	—	—	1
Cerebral Palsy	3	6	10	9	9	37
Cervical Spondylosis	9	4	—	—	—	13
Knee Stiffness	1	1	—	—	—	2
Erb's Palsy	1	1	—	—	—	2
TOTALI	73	73	58	46	49	299

RESULTS

Of the 195 686 patients who attended the hospital between January 2002 and December 2006, 6473 (3.3%) enjoyed physiotherapy services. Five thousand four hundred and seventy-one (2.7%) were inpatients while 93.3% were outpatients. Seven hundred and sixty-six (14.0%) inpatients received physiotherapy. Out of the 190, 215 outpatients, 180, 479 (94.88%) were between 18 years and older. Majority (94.5%) of the patients on outpatient physiotherapy were above 20 years of age. More female (55.5%) participated in the stress management and health promotion (Table 2). More female (55.5%) participated in the stress management and health promotion sessions (Table 2). Eight hundred and eight (15.3%) of the physiotherapy patients/clients participated in stress management and health promotion.

The most common co-morbid health problems commonly referred for physiotherapy were low back pain, knee arthritis, stroke, cerebral palsy, shoulder injury and nerve injuries respectively (Table 3). The most common co-existing health problems referred for physiotherapy are low back pain (85; 21.7%), knee osteo-arthritis (82; 20.9%), stroke (64; 16.3%) and shoulder pain (29; 7.4%). Patients who did not present with physical disability or neuro-muscular problems were not referred for physiotherapy despite having mobility and postural problem that required physiotherapy. Majority (82.5%) of the patients had inorganic psychosis including mild to moderate depression, anxiety, anger and eating disorders while 8.5% were referred due to complications from the treatment of organic psychotic illnesses.

DISCUSSION

Musculoskeletal injuries are not uncommon with mentally ill individual (Gbiri, 2007; 2011). These injuries occur indifferent ways including those sustained during restlessness/hyperactivities, substance abuse (for the injectables) or sometimes during restraint (Gbiri, 2007; 2011). Conditions like back pain, shoulder pain and injuries, arthritis, neuritis, sciatica, nerve injuries and musculo-skeletal injuries often affect

intervention and recovery in individuals with mentally illness (Gbiri, 2007; 2011). Some mentally ill individuals are often bound to physically restrain the patient and forcefully brought into the hospital for therapy, especially the aggressive and violent ones. Some were restrained in either spiritual homes or traditional healing centres before orthodox medical intervention. The consequential neuro-muscular injuries are referred for physiotherapy (Gbiri, 2007; 2011). These injuries pose confusion to psychiatrist in the effective management of this group of patients because of choice of drug to avoid drug-drug interaction and complications. The involvement of physiotherapy in management of the neuro-muscular problems and pain go a long way in reducing drug-drug interactions.

Joint degenerative disorders and neuro-muscular injuries are the most commonly reported co-morbid conditions in the participants for this study. Some patients also present stroke with neurological problems and cognitive impairments. The experience of the authors shows that the inter-occurrence of these two neurological disorders pose lots problems for effective rehabilitation programme. These patients lack the ability to follow simple instruction during rehabilitation due to cognitive impairment secondary to either the stroke or the mental illness or both. Therefore, well-planned and meticulously monitored physical exercises with adequate knowledge and experience in neurology and mental illness could be an antidote to this problem. Physiotherapeutic modalities are also used to reduce pain and stress in an individual who abuses substances thereby improving habit resenting and modulate the brain rewarding system, thereby reducing dependency, and increase post-discharged abstinence rate and relapse (Gbiri, 2007; 2011). This is useful in developing where substance abuse is increasing (Rounsaville, 1986; Lurigio and Lewis, 1989; Lawal et al, 1999; Lawal et al, 2004; Ayorinde et al, 2004). It is however unfortunate that none of these drug and substance abuse patients have been referred for physiotherapy for any of these purposes. This is because

that well designed therapy between the psychiatrists who has the primary responsibility to the patients' conditions and physiotherapists who will provide the adjunct therapy has not been well planned and tried.

CONCLUSION AND RECOMMENDATIONS

The importance of physiotherapy in mental health is evidenced in the number of patients/clients who benefited from its services. Therefore, physiotherapy is an integral and indispensable member of the mental health team. However, physiotherapy is still underutilized in the hospital. This points to the need for proper integration of physiotherapy into mental health team in the hospital and other similar health institutions.

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