

AN INVESTIGATION INTO THE ROLE OF PHYSIOTHERAPISTS IN MEETING THE EDUCATIONAL NEEDS OF THE PHYSICALLY AND HEALTH IMPAIRED CHILDREN

**AFOLABI ABIODUN, OLUOKUN PHILIP OLUSUNMADE
& ADESANYA ADENIKE ELIZABETH**

Department of SPH,
School of Special Education,
Federal College of Education (Special),
Oyo, Oyo State,
Nigeria.

ABSTRACT

This paper is an empirical study that investigated the role of physiotherapists in meeting the educational needs of the physically and health impaired children. Subjects for this study were recruited from Olabisi Onabanjo University Teaching Hospital - Sagamu, Ogun State and Oyo State General Hospital - Owode, Oyo, Oyo State. Fifteen Physiotherapists comprising of 12 (80%) males and 3 (20%) females; age ranges of 21 to 41 years and above were randomly recruited for the study from the two hospitals. 8 (53.3%) respondents are B.Sc. holders, 4 (26.7%) respondents are M.Sc. holders and (20%) are Ph.D. holders. All the respondents are also found to be experienced. Data were generated from the respondents through the use of a twenty-item structured questionnaire designed by the researcher and validated. Descriptive statistics of frequency mean and simple percentage was employed to analyze the data. The findings revealed that physiotherapists play major roles in the education of physically and health impaired children (PHIC), such as: prescription of assistive technology and ambulatory devices and so on, and teaching of PHIC how to use them. Furthermore, the findings revealed that physiotherapists also contribute to the independence of these children and prepare them for social integration thereby helping to meet the special education needs of these children. It was concluded that the roles being played by the PTs in the education of the PHIC cannot be over-emphasized.

Keywords: Role of physiotherapists, educational needs, physically and health impaired children.

INTRODUCTION

Physically and health impaired children (PHIC) are among the special needs children that special education is meant for as specified in the National Policy for Education of 1977 which has been reviewed several times. As a result of this, their education is very important and all hands are always on deck to make sure that their education does not suffer a setback. PHIC are those children that have problems in using their muscles, bones or joints and are not difficult to identify since they can benefit from teaching and learning enterprises in an architectural free environment (Oluokun and Afolabi, 2006). Some of them also have variety of health problems that dictate the need for special, medical or education services (Sabatino

and Fuller, 1998). PHIC include those with the following conditions: cerebral palsy, cystic fibrosis, poliomyelitis, convulsive disorders, heart disease, sickle cell disease, asthma, hemophilia, rheumatic fever, cancer, AIDS or any other chronic or acute health problem that limits strength, vitality or alertness and adversely affects the student's educational development. According to Tenth Annual Report to congress as far back as 1988 in the U.S.A, approximately 1.3% (58,328) of all students receiving special education service is orthopaedically impaired while 1.2% (52,658) is counted as other health impaired.

Physical problem can hamper a student's mobility, coordination, stamina, and communication or learning abilities to such an extent that educational objectives are difficult to accomplish and special education intervention is required, for example, children with cerebral palsy typically have deficits in gross and fine motor development as well as speech and communication problems. Therefore, special consideration should be given to this group of students and examiners must have a broad base of skills in order to measure adequately the functional and cognitive abilities of the PHIC. In addition to the areas traditionally evaluated in the assessment of the children with mild handicaps, measures should be included in the areas of gross motor, fine motor and daily skills, perception, recreation and leisure skills, augmentative, communication and sensory input.

Rehabilitation of the PHIC is being done by a team of which physiotherapist is among. Other members of the team include but not limited to the occupational therapist, speech and language therapist, prosthetist, orthotist, physician, nurse, social worker and so on. Assessment of the child will be done first which is time consuming, to know where and how to help the child. One of the main considerations of the team is the use of team approach in developing and carrying out a child's educational programme. Parents and teachers of the child should be also involved in the educational decisions. According to Sirvis (1988), the team is expected to design a programme that meets the needs of the child in five basic goal areas which are:

1. Physical independence,
2. Self-awareness and social maturation,
3. Communication,
4. Academic growth, and
5. Life skills training.

Another important educational consideration is the educational services for the physically impaired which are provided in a variety of settings that include regular classrooms, resource rooms, special classes and other more restrictive settings which include hospital and home bound programmes and it is approximately 8% of students with orthopaedic impairments and 18% with health impairments that are being served in the home and hospital environments (Tenth Annual Report to Congress, 1988). Most common among the related services are occupational therapy, diagnostic services, school health services, counseling transportation and physiotherapy (Connor, Scandary and Tullock, 1988).

Physiotherapy is a health care profession that is concerned with human function and movement and maximizing potentials. It uses physical approaches to promote, maintain and restore physical, psychological and social well-being, taking account of variation in health status. The professionals that administer physiotherapy are known as physiotherapists and they are highly involved in meeting the educational needs of the physically and health impaired (Oluokun & Afolabi, 2006). The primary role of the physiotherapist is to provide for the controlled movement of the extremities and for the other muscles and joint articulation

necessary for the activities of daily living or competitive employment. According to Oluokun & Afolabi (2006), physiotherapists help in meeting the educational needs of physically and health impaired by doing the following outlined below:

1. Evaluate and train sitting and standing balance, transfer, and mobility, including wheelchair use and ambulation.
2. Evaluate gait for lower extremity orthotics/prosthetics to facilitate gait independence and function.
3. Evaluate level of dependence during position changes and provide mobility training to enhance function.
4. Assess skin integrity and sensation and provide precautionary instructions for skin care.
5. Manage oedema and musculoskeletal pain by physical means.
6. Assess total body posture and provide education and exercises to improve alignment, and
7. Teach functional employment skills, including proper lifting techniques.

Physiotherapists also are involved in assessment and treatment of any PHIC as well as preventing irreversible deformity. They help them to develop their physical skill to a maximum and to achieve more personal independence. Physiotherapists also teach the PHIC the handling, use and care of aids and the equipment.

STATEMENT OF THE PROBLEM

Education of an individual aims at an all-round efficiency of which physical fitness of a child cannot be over-emphasized. Different types of exercise programme have been developed over the years with the intent to meet the educational needs of PHIC. This study was therefore set out to investigate the role of physiotherapists in meeting the educational needs of the PHIC.

PURPOSE OF THE STUDY

The purpose of the study is to:

- (1) Determine the roles of physiotherapists towards the physically impaired children.
- (2) Determine the problems being faced by the physiotherapists with respects of their duty to the PHIC, and
- (3) Assess how physiotherapists help in meeting the educational needs of the PHIC.

RESEARCH QUESTIONS

The questions which this study would provide answer to are:

- i. Is there any difference in the educational performance of the PHIC that underwent physiotherapy treatment and those that did not? and
- ii. Do the physically impaired children that received therapeutic treatment encounter the same mobility problem like those that did not receive the treatment?

SCOPE OF THE STUDY

Subjects were recruited from two state-owned hospitals in Oyo and Ogun States. The hospitals used were Olabisi Onabanjo University Teaching Hospital, Ogun State, and Oyo

State General Hospital, Oyo. These hospitals were chosen because they have physiotherapy units and physiotherapists are working there.

METHODOLOGY

The descriptive survey design was adopted for this study. The sample used consisted of fifteen physiotherapists randomly selected from the two hospitals. The instrument used was a structured questionnaire designed by the researcher for the purpose of the study. The questionnaire contains two sections which are A and B. Section A is concerned with the individual physiotherapist personal data, like name of the hospital where the person is working, sex, age qualification, years of experience. Section B consist of leading structured questions that are related to the title to which the respondents are expected to tick yes or no as it is applicable to them. The items enabled the researcher to generate data he used in answering the research questions in order to achieve the purpose of the study.

The instrument was validated by given it to experts for correction, modification before production and administration. Fifteen questionnaires were produced. The questionnaires were personally administered to the respondents during their working hours by the researcher. The rate of return was 100%. The data collected were coded, analyzed and interpreted using descriptive statistics of frequency, mean and simple percentage.

RESULTS

Table 1: Data for responses to items 1-20 on the questionnaire

S/N	ITEMS	RESPONSES					
		YES	%	NO	%	TOTAL NO	TOTAL %
1	Do you see your profession as one of the professions that contribute to the development of special education in Nigeria?	13	86.7	2	13.3	15	100
2	Do physically and health impaired children need physiotherapy treatment for their rehabilitation?	15	100	-	-	15	100
3	Do physically impaired children have problems in using their muscles, bones and joints?	10	66.7	5	33.3	15	100
4	Can physically and health impaired children carry out motor and locomotion functions effectively after being given physiotherapy treatment?	13	86.7	2	13.3	15	100
5	Do you have any problem in visiting the school for the physically and health impaired children?	9	60	6	40	15	100
6	Do you give treatment to all types of physically and health impaired conditions?	12	80	3	20	15	100
7	Has your hospital got any educational programme for physically and health	12	80	3	20	15	100

	impaired individual?						
8	Does government recognize the role of physiotherapists toward the physically and health impaired children?	9	60	6	40	15	100
9	Does the government provide equipment and materials for physiotherapy services?	8	53.3	7	46.7	15	100
10	Does your hospital have enough equipment for the treatment of physically and health impaired conditions?	5	33.3	10	66.7	15	100
11	Is there any difference in the educational performance of the physically impaired that underwent physiotherapy treatment and those that did not?	13	86.7	2	13.3	15	100
12	Do physically impaired children that receive therapeutic treatment encounter the same mobility problem like those that did not receive the treatment?	4	26.7	11	73.3	15	100
13	Does physiotherapist role have any effect on the educational performance of physically and health impaired students?	10	66.7	5	33.3	15	100
14	Have you attended any seminar and workshops organized by the governments on education of the physically and health impaired children?	6	40	9	60	15	100
15	Do you believe that there should be a cordial relationship between you and the special educator in order for the fate of the children in question not to be an illusion?	14	93.3	1	6.7	15	100
16	Do you advise and teach the parents the type of skills they can use to develop their children ability to perform daily tasks?	13	86.7	2	13.3	15	100
17	Has your hospital gotten up to 30 physically impaired students that have benefitted from your service?	10	66.7	5	33.3	15	100
18	Does physiotherapist provide mobility devices such as wheelchairs, crutches for the physically impaired students?	12	80	3	20	15	100
19	Is it necessary for special schools to have residence physiotherapist that will be catering for the physically and health impaired children with severe	13	86.7	2	13.3	15	100

	conditions?						
20	Physiotherapists must work in conjunction with other health professionals in order to meet the needs of the physically and health impaired children?	13	86.7	2	13.3	15	100

DISCUSSION OF FINDINGS

Research Question 1: Is there any significant difference in the educational performance of the physically impaired and health impaired children that underwent physiotherapy treatment and those that did not?

Data gathered from the responses to items 11 and 13 in the table 1 above give clue to this research question. With 86.7% and 66.7% of the respondents agreed to both questions, it showed that there is significant difference in the educational performance of the physically and health impaired students who underwent physiotherapy treatment and those that did not. This also showed that physiotherapist plays a role in the educational performance of physically and health impaired children. This is in line with what Sabatino and Fuller (1998) viewed as part of what physiotherapist does in the education of the physically and health impaired children. This includes:

1. Physiotherapist helps the parents to know the child's problem and teach the parents the skills to develop the child's ability to perform everyday tasks.
2. They also ensure that the child has smooth transition from hospital to home and return to schools in conjunction with the child's parent and the teachers.
3. Physiotherapist also provides information and suggestion about the special equipment and materials that the teachers can use for the physically impaired students.

Research Question 2: Do the physically impaired children that received therapeutic treatment encounter mobility problem like those that did not receive the treatment?

Responses to items 4 and 18 in the above table provide answer to this research question. Majority of the respondents answered yes to the two questions which showed that physically and health impaired children carry out motor and locomotor function after physiotherapy treatment; and that physiotherapist provides mobility devices for the children. This entails that those students provided with mobility aids and are taught the use of it will be able to transport themselves easily from one place to the other. This is in agreement with what Trust (2010) documented that the physically impaired children are mostly affected and limited as far as mobility is concerned and it is part of the physiotherapist role to provide the children with assistive devices like wheelchairs, braces and walkers; also to teach them how to use the devices in order for the children to be able to be moving themselves freely from one place to another and for them to become independent.

CONCLUSION

This study has tried to investigate the role of physiotherapists in the education of the physically and health impaired children. It could be concluded that physiotherapy services are beneficial and necessary for educational improvement of the PHIC. Physiotherapists also assist in the mobility of individuals with physical impairment. The role of physiotherapist cannot be over-ruled in the education of physically and health impaired children and it is also

essential for correction of physical deformities. If the PHIC are properly treated and attended to, they will be able to cope with academic works and their educational needs would be greatly enhanced.

RECOMMENDATIONS

Based on the above results of this study, the following are hereby recommended:

1. Parents should be made to understand the educational needs of their physically and health impaired children.
2. Special schools should employ a physiotherapist who will be resident in the school.
3. Government should provide adequate equipment and materials for physiotherapy services.
4. The physically and health impaired children should be directed to the physiotherapist early as the need arises, especially those with mobility problem and those in need of orthotic and prosthetic devices.
5. There should be cordial relationship between physiotherapists and special educators in order for the role of physiotherapist to become a reality concerning the physically and health impaired children.

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