Problems, Prospects and Possibilities of Inclusive Education for Physically disabled Children in Bangladesh.

A thesis presented to the

BRAC University Institute of Education Development

Submitted by:

Md. Abdullah Al Zubayer

Supervised By

Profulla C. Sarker Ph.D

Professor & Vice Chancellor

Prime University

In partial fulfillment of the requirements for the degree of

Masters of Early Childhood Development

July 10,2011

Ethical Approval Form

Date: _____

Student name: Md. Abdullah Al Zubayer

Title of Thesis Topic: Problems, Prospects and Possibilities of Inclusive Education for Physically disabled Children in Bangladesh.

1. Source of population

2. Does the study involve (yes, or no)
    1. physical risk to the subjects
    1. social risk
    2. psychological risk to subjects
    3. discomfort to subjects
    4. invasion of privacy

3. Will subjects be clearly informed about (yes or no)
    1. Nature and purpose of the study
    2. Procedures to be followed
    3. Physical risk
    4. Sensitive questions
    5. Benefits to be derived
    6. Right to refuse to participate or to withdraw from the study
    7. Confidential handling of data
    8. Compensation and/or treatment where there are risks or privacy is involved

4. Will Signed verbal consent for be required (yes or no)

    1. From study participants
    2. From parents or guardian
    3. Will precautions be taken to protect anonymity of subjects

5. Check documents being submitted herewith to Committee:

    1. Proposal
    2. Consent Form
    3. Questionnaire or interview schedule

ETHICAL REVIEW COMMITTEE

Research Authorization

Title: Problems, Prospects and Possibilities of Inclusive Education for Physically disabled Children in Bangladesh

The Research Checklist indicates:

- ☐ Approved without amendments
- ☑ Approved with advice to research
- ☐ Not Approved. Resubmission is required

Authorized by:

Name: Ekrum Mariam, Ph.D

Position in Ethical Review Committee: chair/co-chair/other

Signature: Ekrum Mariam

Date: 30.07.11

THESIS APPROVAL FORM

Name of the Student: Md. Abdullah Al Zubayer

Expected Date of Graduation: 1st February 2012

Thesis Topic: Child Problems, Prospects and Possibilities of Inclusive Education for Physically disabled Children in Bangladesh

Examiner's comments:

Date of Thesis Submission to the Committee: 10th July, 2011

- ☐ Excellent
- ☐ Good
- ☑ Satisfactory
- ☐ Fail

Thesis Committee Signature: Erum Marium

Approval from the supervisor

In my judgment the thesis and the candidate meet recognized scholarly standards for the degree and is therefore ready to submit his/her thesis to the Thesis Committee.

Signature of the Supervisor

Date:

Details of the supervisor

Name: Profulla C. Sarker, Ph.D

Designation: Professor & Vice Chancellor

Workplace: Prime University

E-mail: pc_sarker@yahoo.com

Telephone: 01727-144445

DEDICATION

Dedicated to-

My Parents

ACKNOWLEDGEMENT

I wish to thank Professor & Vice Chancellor Profulla C Sarker (Ph.D), my honorable supervisor, for his continuing guidance and encouragement throughout this thesis. Dr. Manzoor Ahmed Director, BU-IED, Ms. Mahmuda Akhter Head, ECDRC, BU-IED, Prof. ASM Atiqur Rahman Chairman Institute of Social Welfare, Prof. Nazmul Haq IER, Prof. Dilruba Khanom Dept. of Psychology, Assistant Prof. Dr. Wahida Khanom, Ms. Farida Akhter Chief Executive, Dr. Syed Masud Ahmed Coordinator, also provided their time and expertise to the research committee.

I am especially grateful to Dr. Nishat F Rahman madam Coordinator of BU-IED for his advice and expertise on thesis procedures. Very special thanks to my all faculty members, especially Shakila madam for her dearest advice.

Finally, I express special thanks to my respected & loving classmates due to providing support for my study.

Thanks to all.

TABLE OF CONTENTS

Executive Summary

Human beings are the best creation of Allah. All the beauties are created for them. It has the most elaborate, sophisticated, versatile and creative means of communication. It is only possible by neurophysiological mechanism. Sometime it hampered by disability. It is specially child disability is one of the most challenging issues in worldwide. Overall disability prevalence in Bangladesh is 10% and prevalence of child disability is about 16.41% among total disability (Khan and Ferdous, 2003). So that it is great challenge to provide one of the fundamental rights that is education. Regular educational system and its curriculum is not enough to meet the basic education. It needs inclusive education which is a strategy to improve education systems, by challenging and changing exclusionary policies and practices. Inclusive education is concerned with minimizing and removing barriers to access, participation and learning for all children, but especially for those who have been socially discriminated because of poverty, child labor, disability, gender, ethnicity or other differences. Inclusive education is implementing the right to non-discrimination. This is a qualitative exploratory study done to analyze the challenges for developing countries of moving toward greater inclusion of children with physical disabilities in educational settings.

The general objective of the study is to identify the problems, prospects and possibilities of children with physical disability in the area of inclusive education in Bangladesh. And specific objectives are - To identify background of physically disabled children, to examine the barriers for physically disabled children in inclusive education, to explore the prospects and possibilities of their inclusive education.

This is a document review type of study based on available secondary information to increase understanding of the issues related to children with physical disability and the barriers and possibilities for these children in the educational system of Bangladesh. Qualitative method has been applied to analyze the secondary information to write up this thesis. Systematic approach has been used to review the literature. Data processed according to prioritization of the data.

The number of people with disabilities in Bangladesh is increasing and facilities are not enough to meet special attention. Based on an assessment of the available figures and estimates by WHO and World Bank for developing countries, an overall disability prevalence is about 10% of the population remains a valid working estimate. The prevalence of disabilities in children below 18 years can be estimated to 6% and for the age group above 18 years the prevalence to about 14% or corresponding to 3.4 million children with disabilities and 10.2 million adults with disabilities. One recent study under the ESTEEM project of Primary Education Development Project (PEDP-l) has found that about 75% of disabled children are not enrolled in any form of educational program (Ministry of Education, 2004). The characteristics of physically disabled children are: deficits in gross motor and/or fine motor functioning, deficits in locomotor and non-locomotor functioning, possible deficits in cognitive, social and adaptive behavior skills and possible impairments such as language, vision, hearing, and also sensory, possible use of assistive devices, isolation from peers, low self-esteem and restricted access – opportunities to educational system.

This is the opportunity to create communities where all children as well as disabled children are permitted to learn together in inclusive schools. This is the future will only become a reality when public policy requires every public school to provide a quality education to every child including those with special needs and disabilities. Inclusive education for disabled children promotes individuals to achieve a substantial degree of independence. Continuing therapy, regular or special education, counseling, technical support, community integration opportunities, recreation and possible personal attendants may be included in programs aimed at special education for physically disabled children. The continuation of inclusive education for disabled children will expedite these students through higher education and into a world of independent living and accomplishment.

1.1 Background and Literature Review

Human beings have the most elaborate, sophisticated, versatile and creative means of communication, which is made possible by their more complex neurophysiological mechanisms (Suresh & Swapna, 1997). Bangladesh is considered to be one of the least develop countries in the world as measured in terms of average income, calories consumed per person, high infant mortality rate and low literacy rate (Khan and Ferdous , 2003). On the other hand education is one of the most fundamental rights of any person, living in any country in the world. The Constitution of the Peoples Republic of Bangladesh in article 17 suggests that Bangladesh needs to initiate a need based compulsory free education. "Education for All" has been declared the in 1990 and Bangladesh government also made a declaration on "Education for All" and introduced Compulsory Primary Education through constitutional means (Alam, 2006). Inclusive education is a strategy to improve education systems, by challenging and changing exclusionary policies and practices. Inclusive education is concerned with minimizing and removing barriers to access, participation and learning for all children, but especially for those who have been socially discriminated because of poverty, disability, gender, religion, ethnicity or any inequalities (UNESCO, 2006).

According to the World Health Organization (WHO) 10% of total population in Bangladesh are disabled (Akhter and Rahman, 2004). According to Bangladesh bureau of statistics 16.41% children are disabled due to birth injury (Khan and Ferdous, 2003). A large epidemiological study of children with disabilities aged 2-9 years in Bangladesh indicated a prevalence rate of 6.8% for all grades and types of disabilities and of 1.5% for serious disabilities. There is no pre-birth test and no known cure. For most, the cause is unknown (Steinbok and McLeod, 2005). An estimated 20% of infants are born prematurely in Bangladesh, and 30% have low birth weight (LEW) ,with a total population of greater than 146 million people, including 20 million children greater than 5 years of age, large, unrecognized populations may be at risk for neurodevelopment morbidity, particularly considering that 85% of deliveries occur at home, often with no skilled

care; only 7% of births are ever registered; and primary health care services do not include screening for the developmentally delayed child (Cerebral palsy and Bangladesh, 2006).

Disability does not just affect an individual, but the whole family and community around the individual. Physical disability includes many non-advancing movement dysfunctions, which have many different causes. At least one child in ten is born with congenital disabilities or acquires physical, mental or sensory impairments due to preventable diseases, accidents and injuries, malnutrition, micronutrient deficiencies and lack of adequate care pre-natal care. In the past five decades, UNICEF and its partners have achieved remarkable gains in primary prevention to reduce death and illness among young children and prevent childhood disability through increased immunization coverage, improved nutrition, reduction of micronutrient deficiencies, and access to clean water and sanitation. The number of people with disabilities in Bangladesh is increasing and facilities are not enough to meet special attention. Based on an assessment of the available figures and estimates by WHO (2000) and World Bank (2004) for developing countries, an overall disability prevalence is about 10% of the population remains a valid working estimate. The prevalence of disabilities in children below 18 years can be estimated to 6% and for the age group above 18 years the prevalence to about 14% or corresponding to 3.4 million children with disabilities and 10.2 million adults with disabilities. In accordance with the degree of disability, they are identified as mild, moderate and severely handicapped (Ministry of Education, 2004). There is no comprehensive data is currently available in the country indicating the number, type, or degree of disability amongst the youth population. However, the World Health Organization (WHO) estimates there are about 3.4 million children with some form of disability. A large majority of them have no access to education. The reasons are several; first, the 64 residential schools are established by the Ministry of Social Welfare for visually impaired children can accommodate no more than 1,200 children. Though some 113 NGOs are engaged in activities for the disabled organized under the National Forum of Organizations Working with the Disabled (NFOWD), most of the NGOs have limited programs for hearing-impaired children. Second, virtually all special-needs schools are located in or near urban centers and inaccessible to children from rural areas. Third, there remains a stigma attached to physical disabilities, particularly in the case of intellectual impairment, physical deformity, and uncoordinated movement especially in the case of girls.

Level of family income appears not to influence enrolment significantly as disablement is feared as a cause for social disgrace-often ignored, hidden or denied. Finally, there is a severe shortage of teachers trained in the skills to effectively communicate with disabled children. One recent study under the ESTEEM project of Primary Education Development Project (PEDP-l) has found that about 75% of disabled children are not enrolled in any form of educational program (Ministry of Education, 2004). This study is concentrate with the physically disabled children and the prospects and possibilities of inclusive education in Bangladesh.

1.2 Rational of the Study

The concept of Inclusive Education (IE) system is a shift from the traditional welfare and service oriented practice of special/integrated education that was not appropriate to be a much effective and rights-based system. Inclusive education is a new concept and globally recognized but implementing this system is depending upon the values, attitude, and resources. A vast task is needed to be done to introduce effective inclusive education system to ensure education equity among all children including physically disabled children. There is no example of successful implementation of Inclusive education in front of us as yet. The inclusive education for children with physical disabilities caused by cerebral palsy is no doubt a new dimension and it has valid logic for implementation in different society suited to its local socio-economic and cultural condition.

It has been found that the Ministry of Social Welfare, Ministry of Primary and Mass Education and Secondary and Higher Education; Ministry of Women and Children Affairs separately prepared their policy and plan and which is not at all harmonized with the International Concept of Inclusive Education and Education for All. So, a close coordination and joint effort among all the concern Government Ministries and Departments is needed to prepare an effective and uniformed action plan to ensure the inclusive education to find the prospects and possibilities of children with physical disabilities and individuals with special needs.

This is a qualitative exploratory study done to analyze the challenges for developing countries of moving toward greater inclusion of children with physical disabilities in educational settings. The study focuses on pedagogical challenges to realizing more inclusive education. Inclusive

education is not only the practice of teaching and learning, but also the ideas that inform practice held at various levels of the education system and in broader society. This research, therefore, examines prospects and possibilities of teaching and learning and ideas about the social purposes of inclusive education. It is based on a review of relevant literature drawing together insights from developing and developed countries. The findings of this study will contribute to the planners and policy makers to checkout an appropriate and effective policy for the overall welfare of the disable children of Bangladesh.

1.3 Conceptual Framework

The two specific concepts have identified in this study which are physically disabled children and inclusive education. These concepts have been explained here to provide a clear conception about this study.

1.3.1 Physically Disabled Children

A physical disability involves a continuing physically disabling condition or other health impairment which requires an adaptation to the students' school environment or curriculum. Children with these disabilities often must rely upon assertive devices such as wheelchairs, crutches, canes, and artificial limbs to obtain mobility. The physical disability may either be congenital or a result of injury, muscular dystrophy, multiple sclerosis, cerebral palsy, amputation, heart disease, pulmonary disease or more. Some persons may have hidden (nonvisible) disabilities which include pulmonary disease, respiratory disorders, epilepsy and other limiting conditions. Child disability has traditionally been equated with an individual physical or mental impairment. It is assumed to have a physiological cause and therefore to be susceptible to medical cure or care. Traditional forms of rehabilitation aim to 'normalize' disabled people, thus, for example, sometimes favoring time-consuming and painful walking over wheelchair use (Finkelstein, 1994). A physical disability could include, but is not limited to, visual, auditory, mobility, speaking or manipulation problems.

Children with disability are those who have or are at increased risk for a chronic physical, developmental, behavioral, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally. The children who are

unable to fulfill their daily needs because of physical and mental problems need special education, competent remedial measures, special care and nursing. The deaf, blind, physically handicapped, mentally handicapped and the epileptics fall within the purview of special children. They are also termed as children with multiple disabilities. In accordance with the degree of disability, they are identified as lightly, moderately and seriously handicapped (Ministry of Education, 2004). These children experience impairment in their sensory, cognitive, motor, emotional, or behavioral functioning, which requires support, ongoing intervention, or accommodation provided by others in order to participate in an age-appropriate fashion in education, social activity, or physical activity in an appropriate environment.

Disability is something imposed on top of our impairments by the way we are unnecessarily isolated and excluded from full participation in society. Disabled people are therefore an oppressed group in society. Thus we define impairment as lacking part of or all of a limb, or having a defective limb, organ or mechanism of the body; and disability as the disadvantage or restriction of activity caused by a contemporary social organization which takes no or little account of people who have physical impairments and thus excludes them from participation in the mainstream of social activities (UPIAS/Disability Alliance, 1976).

The physical disability may be present since birth or it may come about later in a person's life. However, a physical disability may or may not be a handicap to a person, as the following real life situations show. Childs who have non-sensory physical limitations i.e. limitations not because of sense organs like eyes or ears, but because of other organs like limbs, bones, joints or muscles. Another thing is health problems which limit the individual's ability to lead a normal, healthy life (Stainbook, & Mcleod, 2005). When the disability arises later in childhood, for example, due to an accident or diseases, problems in training can be greater because the individual, who has already got accustomed to one way of living, has to adapt again to an entirely different set of circumstances. (Carlson, 2002). Physical disabilities can be caused by: damage to the brain or spinal cord, damage to the muscles or bones and effects of diseases and illnesses on general health (Mc Conachie, Smyth, & Bax, 2006). Based on these causes, physical disabilities have been categorized into: Neurological disorders caused due to damage to the brain or the spinal cord, Musculo-skeletal disorders caused due to damage to muscles or bones and

Others that are caused due to illness and disease and have an effect on the general health. (Chowdhury, 2007). Neurological examples are cerebral palsy, spina bifida, hydrocephalus, polio myelitis. Musculoskeletal examples are muscular dystrophy, arthritis, club feet, Cleft Palate and other examples are asthma, accident (Damiano, 2004).

There are several factors that can cause physical disability. Prenatal Factors (Before Birth): Damage to the developing fetus during pregnancy can lead to physical disabilities. This can happen due to poor health of the expecting mother, inadequate consumption of nutritious food during pregnancy, particularly during the first three months, intake of medicines without the doctor's recommendation during pregnancy, particularly during the first three months. Some drugs to control morning sickness have been known to cause physical defects, pregnancy before 20 years or after 35 years of age. If the expectant mother takes care of these aspects, many of the physical disabilities can be prevented. Particularly, as regards morning sickness, help the mother realize that this is normal, and not an illness and consuming medicines to control this should be avoided. However, if the vomiting is severe, then the medicine should only be taken on the doctor's recommendation. Perinatal Factors (During Birth): Complications during delivery can lead to physical disabilities in the child. Expectant mothers who are less than 4'10" in height, have a very narrow pelvis, have a history of prolonged labor in previous childbirths, have a big baby, have had bleeding before childbirth, have a poor nutritional and health status, have more chances of complications during delivery. Physical disability in the child may also occur due to lack of oxygen to the child's brain during delivery, use of instruments to help the child birth. Therefore, it is important that the delivery be done by a trained person at home or in the hospital. Postnatal Factors (After Birth): Illness, disease, accidents, deficiency of adequate calories, proteins and vitamins in the child's diet can lead to physical disabilities (Mc Conachie, Smyth, & Bax, 2006).

1.3.2 Inclusive Education

The working definition of inclusive education (IE) is an approach to improve the education system by limiting and removing barriers to learning and acknowledging individual children's needs and potential. The goal of this approach is to make a significant impact on the educational opportunities of those: who attend school but who for different reasons do not achieve

adequately and those who are not attending school but who could attend if families, communities, schools and education systems are more responsive to their requirements. Inclusive education is a strategy to improve education systems, by challenging and changing exclusionary policies and practices. Inclusive education is concerned with minimizing and removing barriers to access, participation and learning for all children, but especially for those who have been socially discriminated because of poverty, child labor, disability, gender, ethnicity or other differences. Inclusive education is implementing the right to non-discrimination. If acknowledges that children are different and that such diversity is normal. It challenges education systems and schools to become more learner-centered, flexible and diversity-friendly. Inclusive education enables children to learn and live together, which is a first necessary step towards a more tolerant and democratic society. It recognizes every child's right to be part of mainstream life irrespective of his/her socioeconomic background or individual characteristics. Inclusive education is a basic human right (UNESCO, 2006). The drive to achieve Education for All (EFA) by 2015 has led to a focus on the barriers to participation in basic education for marginalized groups (UNESCO, 2010). In particular, there has been significant criticism that disability was not mentioned in the United Nations Millennium Development Goals (MDGs)1 (Albert et al., 2005): As the world strives to achieve the MDGs it is important that disability is not treated as a left over (Obeng Asamo, n.d.). It is increasingly recognized that the MDGs will not be achieved without the inclusion of disabled children and young people in education, given the close links between disability, lack of education and poverty (United Nations Secretary General, 2007). Many disabled children and young people around the world are denied sustained access to basic education. Some of these disabled children never enter school, others start but make poor progress eventually 'drop out' and it appears that a relatively small proportion are educated in a parallel system of special schools, running alongside mainstream schools. In the terms of the CREATE (Consortium for Research on Educational Access, Transitions and Equity) model of zones of exclusion (Lewin, 2007), they are likely to be concentrated in zone 1 (never having been enrolled), zone 2 (having 'drop out' of primary school) or zone 3 (in primary school but with poor achievement and/or attendance and therefore at risk of dropping out before completing the primary cycle). Children and young people are also vulnerable to acquiring impairments that affect their access to education at any point in their educational careers, for

example due to conflict or inadequate access to healthcare. Exclusion from education contributes to further economic exclusion in adult life with many disabled people unable to find work (UN Enable, 2008).

1.4 Objectives of the study

The general objective of the study to identify the prospects and possibilities of children with physical disability in the area of inclusive education in Bangladesh. And specific objectives are given below- To identify background of physically disabled children, to examine the barriers for physically disabled children in inclusive education, to explore the prospects and possibilities of their inclusive education.

This is a document review type of study based on available secondary information to increase understanding of the issues related to children with physical disability and the barriers and possibilities for these children in the educational system of Bangladesh. The key informants were the government officials, representatives of NGOs, NGO networks, INGOs, UNICEF Bangladesh, school authorities, physically disabled children and their parents. To conduct this research project the documents have been reviewed in terms of published as well as unpublished research report, books and articles. Documents and reports have been collected from internet, DPE, MOWCA, MOPME, CDD, CRP and some other child disability organization. The literatures have been critically reviewed to supplement the secondary information. Systemic approach has been used to review the literature.

Qualitative method has been applied to analyze the secondary information to write up this thesis. The qualitative method has been used to show the figure. The emphasis has been given on qualitative method to analyze the overall data. The researcher has used three different techniques to integrate other scholars of ideas into this research project (Bailey, M. & Diana, 1997). One of the technique is summarizing, only the key point from the books, research article or any other written documents, research reports, magazine, newspaper etc. Another technique has been used in this study is paraphrasing where the researcher have presented an authors idea into this research. Direct quoting technique has been also used to conduct this research. Systematic approach has been used to review the literature. Data processed according to prioritization of the data.

The characteristics of physically disabled children are: deficits in gross motor and/or fine motor functioning, deficits in locomotor and non-locomotor functioning, possible deficits in cognitive, social and adaptive behavior skills, possible impairments such as language, vision, hearing, and also sensory, possible use of assistive devices, isolation from peers, low self-esteem and restricted access – opportunities. Cerebral palsy (CP) is the most common chronic disability of childhood today. It is ubiquitous and it occurs all around the world. In developed nations, the incidence is about 1 to 2 per 1000 births. In spite of improved obstetrical and perinatal care, CP remains with us. As a result of injury to the brain, these children have motor defects which will affect them for their entire lifetime. Treatment often starts when they are infants, and continues throughout their life, even into adulthood. The problems involved are complex; not only do these children have problems of mobility, but they can also have seizure disorders, gastrointestinal system problems, learning and perceptual difficulties, visual problems, hearing problems, and growth deficiency. In spite of all these numerous difficulties, cerebral palsied children can be helped (Baker & Selim, 2005). But disability has almost always been seen as a charity issue, then it has often been seen as a medical concern.

Another condition Spina bifida is a neural tube defect (a disorder involving incomplete development of the brain, spinal cord, and/or their protective coverings) caused by the failure of the fetus's spine to close properly during the first month of pregnancy. Infants born with spina bifida sometimes have an open lesion on their spine where significant damage to the nerves and spinal cord has occurred. Although the spinal opening can be surgically repaired shortly after birth, the nerve damage is permanent, resulting in varying degrees of paralysis of the lower limbs. Even when there is no lesion present there may be improperly formed or missing vertebrae and accompanying nerve damage. In addition to physical and mobility difficulties, most individuals have some form of learning disability. There is no cure for spina bifida because the nerve tissue cannot be replaced or repaired. Treatment for the variety of effects of spina bifida may include surgery, medication, and physiotherapy. Many individuals with spina bifida will need assistive devices such as braces, crutches, or wheelchairs. Ongoing therapy, medical

care, and/or surgical treatments are necessary to prevent and manage complications throughout the individual's life. Surgery to close the newborn's spinal opening is generally performed within 24 hours after birth to minimize the risk of infection and to preserve existing function in the spinal cord. The prognosis for individuals with spina bifida depends on the number and severity of abnormalities. Prognosis is poorest for those with complete paralysis, hydrocephalus, and other congenital defects. With proper care, most children with spina bifida live well into adulthood.

Another cause for child disability is Muscular dystrophy, refers to a group of genetic diseases characterized by progressive weakness and degeneration of the skeletal or voluntary muscles which control movement. The muscles of the heart and some other involuntary muscles are also affected in some forms of muscular dystrophy, and a few forms involve other organs as well. Duchene is the most common form of muscular dystrophy affecting children, and myotonic muscular dystrophy is the most common form affecting adults. Muscular dystrophy can affect people of all ages. Although some forms first become apparent in infancy or childhood, others may not appear until middle age or later.

There is no specific treatment for any of the forms of muscular dystrophy. Physical therapy to prevent contractures (a condition in which shortened muscles around joints cause abnormal and sometimes painful positioning of the joints); orthotics (orthopedic appliances used for support) and corrective orthopedic surgery may be needed to improve the quality of life in some cases.

The prognosis of muscular dystrophy varies according to the type of muscular dystrophy and the progression of the disorder. Some cases may be mild and very slowly progressive, with normal lifespan, while other cases may have more marked progression of muscle weakness, functional disability and loss of ambulation. Life expectancy may depend on the degree of progression and late respiratory deficit. In Duchene muscular dystrophy, death usually occurs in the late teens to early 20s. However, there is a growing realization that the greatest problems faced by children with disabilities are prejudice, social isolation and discrimination in society.

The National Constitution suggests that Bangladesh need to initiate a need-based compulsory and free education with necessary legal basement. An Education policy of Bangladesh (1997)

suggests provisions for Integrated Education along with Special Education provisions depending on the need of children with disabilities. It also recognized the necessity of including disability issues in teachers' training curriculum so that the regular teachers could manage children with disabilities in regular settings. The recently enacted Bangladesh Disability Welfare Act 2001 also provides legislative support to ensure education of children with disabilities. The Bangladesh National Policy on Disability (1995) indicated creation of options for proper education of children and people with disabilities. Bangladesh is also signatories to the Salamanca and Dakar framework of action, which should have ensured the inclusion of all children, including children with disabilities into education (World Bank, 2004).

However, Bangladesh is yet far behind from the target of Inclusive Education it wanted to reach. Though the literacy rate is increasing day by day, the quality of education is falling behind. While the enrollment in primary education is satisfactory, the drop-out rate is very high in reality, which is not always found in papers. Another crucial failure is the absence of planning to attract children with physical disabilities into education. The children with disability have always added a large share in the illiteracy percentage in our country. Recent studies in Bangladesh suggest that vast majority of children with disabilities never attended schools and that a large percentage of the ones who do attend mainstream schools soon drop out due to inaccessible school infrastructure, lack of learning scopes, improper learning process and unfriendly school environment. But amongst the children that are not in any form of educational setups, a large majority shows a keen interest to acquire education. Existing policies related to education and disabilities were found to be contradictory to each other. Appropriate policy formulation and adaptation is required to overcome such barriers. The concerned people involved in education are not adequately informed on the situation of children with disabilities. In most cases, there are also many misconceptions on disability issues, which are not helping the issue of mainstreaming education of children with disabilities much either (World Bank, 2004).

Two baseline studies conducted by Action Aid Bangladesh offer different incidence figures, but probably more accurate groupings than do the Bureau of Statistics studies (Kabir & Rahman, 1996). These studies, which were conducted in nine different locations in all parts of Bangladesh, derived overall incidence figures between 7 percent and 15 percent. These figures

indicate that the GOB's incidence figures are conservative and, perhaps, under-representative. However, since the GOB's report represents the largest study of subjects, they were used for estimation of incidence.

This report focuses on the population of pre-primary and primary aged children, ages 3-10; thus, it is necessary to calculate that population for estimations of disabilities within this age group. The formula used to determine the numbers of children ages 0 – 10 is used to calculate the number of children in Bangladesh who are ages 3 – 10. Using the WHO figures for 2004, and the 1991 BBS sample study, the total number of disabled children falling between ages 3 and 10 is 2,559,222. This reflects an incidence of 9.9% of all children between 3 and 10 (World Bank, 2004). The estimated number of Bangladeshi children, ages three to ten, calculated by disability categories are given in table no. 1.

Table-1: Types of disability of 3-10 years aged children

Type of Disability	Percentage Of Population	Total No. Of children
Mental Illness	1.4	35,829
Cerebral Palsy	7.0	179,145
Multiple	3.4	87,014
Intellectual	7.4	189,382
Visual	19.7	504,166
Speech and Hearing	19.6	501,607
Physical	41.5	1,062,078
Total:	100%	2,559,221

The table shows that 41.5 percent children are physically disabled followed by 19.7 percent visual disable. Simultaneously 19.6 percent children are speech and hearing disabled. On the other hand, cerebral palsy and intellectual disabled are almost same. It has been found that different types of disability associated with multiple causes based on socio-economic and cultural condition of the people in which they live.

Because of the difficulty in clarity of terms used in incidence research, accurate data are difficult to find. There are a few key studies are country reports compiled by NGOs to describe Bangladeshi disability situations. There are almost no intensive studies dealing with children from three to ten. Promising starts are being made by Save the Children Federation, Inc. and Sesame Street, which will collect data from a service-based activity. Each of these projects will focus on children with educational special needs rather than emphasize types of disabilities. This convention is considered by most child researchers to be completely appropriate for this age group. Perhaps these agencies will be able to assist in pioneering the sampling procedures and tests that are necessary to find standardized and comparable educational needs for pre-school primary children in Bangladesh. Because poverty, malnutrition, disease and stigma are so prevalent in Bangladesh, it is obvious that the disability population will be bigger and different than in most other countries, especially developed countries. This report raises the questions of efficacy of disability estimates.

3.1 Data on disability in Bangladesh

Disability is not included in any routine data collection or surveillance systems in the health sector, but it has been included in national censuses in 1982, 1986 and 1991. However, the reported prevalence rates between 0.77 and 0.47 are far below international and national estimates. A survey on prevalence of disability from 1994 by the Bangladesh Bureau of Statistics shows a rate of 10.62 disabilities per 1000 population (BBS, 1994). This figure is also considerably lower than the commonly used international estimates. Underreporting of disabilities is very common in national censuses, due to inadequate questionnaire design, insufficient training of enumerators, and possibly also families' 'forgetting' members with disabilities (World Bank, 2004).

The nationally representative Bangladesh Health and Injury Survey 2003, conducted by Institute of Child and Mother Health (ICMH), UNICEF and The Alliance for Safe Children (TASC) shows the incidence of disabilities due to injury only and do not provide information on

prevalence or the total number of disabilities due to other causes. It does, however, show that the incidence of severe disabilities *caused by injury* is very low in the age group between 0- 17 years of age which represents 44,4% of the total population (ibid).

WHO has estimated that the *distribution of causes* of moderate to severe disabilities on a global level in 1998 were as follows: non-communicable somatic conditions account for 26%, communicable diseases 23%, congenital or perinatal conditions 18%, trauma or injury 17% (where traffic accidents ranks higher than occupational accidents and home accidents), and mental conditions 16%. Most studies from Bangladesh do not distinguish between congenital disabilities from cerebral palsy versus disabilities occurring later in life (World Bank, 2004).

3.2 Educating Children with Disabilities

After two decades of global advocacy since the International Year of Disabled Persons in 1981, especially during the UN Decade of Disabled People (1983-1992), the majority of an estimated 150 million disabled children throughout the world remain deprived of learning opportunities. Despite advances in education, in developing countries less than five percent of disabled children are enrolled in schools. Most disabled children are silent and invisible members of many communities. In addition, most disabled children are often at risk of abuse, exploitation and neglect. At least one child in ten is born with congenital disabilities or acquires physical, mental or sensory impairments due to preventable diseases, accidents and injuries, malnutrition, micronutrient deficiencies and lack of adequate care pre-natal care (UNICEF, 1999). In the past five decades, UNICEF and its partner organizations have achieved remarkable gains in primary prevention to reduce death and illness among young children and prevent childhood disability through increased immunization coverage, improved nutrition, reduction of micronutrient deficiencies, and access to safe water and sanitation.

It is important to mention that prevention of disability, early detection and appropriate early interventions to prevent impairments from turning into full-scale disability are essential components of UNICEF's comprehensive programmatic response in the context of early childhood care for survival, growth and development. As part of its global vision for early childhood care and development, UNICEF is working in advocacy and programming emphasis

towards promotion of positive infant and child development that reduces the risk of disabilities (UNICEF, 1999).

As part of its primary prevention and the health and nutrition goals of the World Summit for Children, significant progress has already been made in addressing vitamin A and iodine deficiency, which are the leading causes of visual disability, mental retardation and stunting among children. UNICEF has focused its efforts on providing support to national legislation, quality monitoring, assessment of the impact of Iodine Deficiency Disorders and public information on the benefits of treated salt. Between 1993 and 1996, UNICEF purchased nearly a half-billion high-dose vitamin A capsules that were distributed in 136 countries, helping to bring or keep vitamin A deficiency under control. Other measures, which have had an impact on reducing disabilities among children, include acceleration in polio vaccinations, and progress towards the elimination of guinea worm (ibid).

Early detection of impairments, early stimulation and cognitive and psychosocial development of young children, especially at age 0-3, will be among the focus of UNICEF's agenda for the coming years. UNICEF will work with its national partners to enable families to create a caring environment, rich in stimulation, attention and affection and interaction between children and caregivers that is responsive to the needs of growing children, particularly within the first three years of life. UNICEF will work and advocate with its partners to enable families to care for children with disabilities and protect them from abuse, violence and sexual and economic exploitation. UNICEF will assist with development of knowledge, skills and attitudes of caregivers and society in order to engage families in the process of learning and building skills for home-based childcare that enhances children's, physical, emotional, social and cognitive development. Guided by the Convention on the Rights of the Child, UNICEF advocates for the protection, care, special needs and education of children with disabilities. It has placed emphasis on the need for secondary and tertiary prevention through early detection of disabilities and early intervention measures to reduce the impact of disability on the child. Today more than ever, children with disabilities are realizing their rights to good care and to protection from discrimination and abuse. All children have the right to access support and services that promote healthy growth and development regardless of where they start in terms of knowledge, skills and

abilities and disabilities. The majority of 'disabled children' are able to participate in mainstream schools with their 'non-disabled peers' provided that schools are accessible and that the education system and its institutions encourage curriculum modification, flexibility, adaptability and teacher training to facilitate inclusion of children with disabilities. Inclusive education for children with disabilities must be part of mainstream national education policies and strategies. The Rules call on States to provide special attention to the education of disabled girls and boys from pre-school and primary school age. The Statement and Framework for Action from the UNESCO World Conference on Special Needs Education, held in Salamanca in 1994, echo the themes that ordinary schools should seek to accommodate all children, regardless of their physical, intellectual, emotional, social, linguistic or other requirements. According to this, national educational policies should stipulate that children attend the same neighborhood schools they would attend if they did not have a disability. To accommodate the education of these children, there is obviously need for a clearly stated policy, understood and accepted at the central government level, in individual schools, and by the wider community. There is greater need for curriculum flexibility, allowing adaptation of teaching methodologies and provision of accessible learning resources in the classroom and school libraries. There is also need for trained teachers, ongoing teacher training and additional support teachers to meet the requirements of children with special educational needs. Most of all, physical accessibility of schools and classrooms, in terms of distance, ramps, steps and other needed adaptations, will facilitate inclusion of children with disabilities (UNICEF, 1999).

3.3 Barriers in Inclusive Education

While we cannot neglect the importance of inclusive education it remains unanswered why the practice of inclusive education is presenting problems. It appears that it is both at the level of government policy but rather at the level of implementation. While the policy states that all children should go to school – and governments are enforcing this rule – in many cases quality learning is not taking place, which is contradictory to the ethos of inclusive education. The reasons for the non implementation of the inclusive education, is because of various barriers which are both external and as well as internal. The external barriers are confronted before coming to and getting enrolled in schools, which includes physical location of schools, non-

availability of school, social stigmatization or economic conditions of the learners (Pivik, et al., 2002).

The internal barriers are mostly psychological barriers like self concept, confidence etc which are sometimes imposed by the external factors and first step to remove the internal barriers is to remove the external barriers (ibid). The following are some of the external barriers.

3.3.1 Attitudinal Barriers

It has been noted that disabled students suffer from physical bullying, or emotional bullying. These negative attitudes results in social discrimination and thus leads to isolation, which produces barriers to inclusion. Regarding disabled children some regions still maintain established beliefs that educating the disabled is pointless. It is sad to note here that these barriers are caused by society, which is more serious to any particular medical impairment. The isolation which results from exclusion closes the doors of real learning. The negative attitudes often develop due to lack of knowledge (ibid). Along with information about disability or condition, their requirements must be provided to peers, school staff and teachers as well. Increasing interactions between learners with special needs and community through organization of fairs, meetings etc. It is also very important to counsel the parents of these learners, especially in rural areas about the importance of providing education for developing self-reliant individuals. There is also a need to shift in perspectives and values so that diversity is appreciated and teachers are given skills to provide all children, including those with different learning needs, quality education. Also, at the policy level, it should be mandatory for all to educate about disability, so that a responsive individuals who respects disability could be developed.

3.3.2 Physical Barriers

Along with the attitudinal barriers which are faced by the learners on the daily basis, another important barrier is the physical barriers, which includes school buildings, playgrounds, washrooms, library etc. Apart from this, the majority of schools are physically inaccessible to many learners because of poor buildings, particularly rural areas (Pivik et al., 2002). Since most schools are not equipped to respond to special needs, poses blockage for learners in physically

getting into school. For example, many of the students require a personal assistant for such basic activities as taking lunch in recess, personal care, remedial education efforts.

Most school buildings don't respond to the requirement of these learners properly. For example, if there is a ramp, sometimes it is too steep, often the doors were too heavy for the student to open unaided which impedes the access.

Hence, it is important for implementing the inclusive education in schools, it is important to overcome such physical barriers. Along with basic changes in the architectural designs such as widening doorways, removing unnecessary doors, installing proper ramps, technology could be used in the form of motion sensors to open doors, flush toilets and automatic door buttons for easier access through doors. Voice recognition technology can also used for activating many of the above-mentioned barriers. Since, there is an inadequacy of resources available to meet the basic needs in education, it is estimated that for achieving the inclusive education goal will require additional financial support from the government (Pivik, et al., 2002).

3.3.3 Inappropriate Curriculum as a Barrier

In any education system, the curriculum is one of the major obstacles or tools to facilitate the development of more inclusive system. Curriculum includes the broad aims of education and has its implications on transactional and evaluation strategies. In our country of diversity, curriculum is designed centrally, hence which leaves little flexibility for local adaptations or for teachers to experiment and try out new approaches. This results in making the content inaccessible and demotivating. Therefore, the design and development of specific learning and teaching materials and teaching arrangements should take cognizance the needs, interest, aspirations and uniqueness of the learners (Pivik et al., 2002).

As a result of the knowledge based curriculum, the examinations are also too much content oriented rather than success oriented which is the demand of flexible inclusive curriculum. In the inclusive settings, assessment of learners must be against the broad aims of curriculum and education and also must be evaluated against their own achievements rather to be compared by others, which will be truly individualized (Pivik et al., 2002). Also, it is suggested that the

assessment has to be continuous, based on the feedback of both learners and the teachers. This will surely help learners also teacher's in selecting appropriate teaching methods and styles.

As a consequence, all learners can be evaluated against their own achievements as opposed to being compared to other learners. Portfolio assessment can also be used. This would include learners" own products such as final „best" work, various works in progress, samples of tests completed, certificates earned, goals met, daily work samples, self-evaluation of the progress of learning and teachers" observations (UNESCO, 2006).

3.3.4 Untrained Teachers as Barrier

For implementing the inclusive education successfully, it is important that teachers must have positive attitudes towards learners with special needs. But, because of lack of knowledge, education, understanding, or effort the teachers give inappropriate substitute work to the learners, which eventually leads to learners dissatisfaction and poor quality of learning (ibid). Another important feature of the schools is high teacher–student ratios (average 1:45) and where it is expected that learners of diverse abilities have to be taught together. At the first place, there is a scarcity of trained teachers to deal with the diversity and secondly, it is very wrong to assume to deal with 45 learners with diversity. Hence, it is important to reduce the teacher- learner's ratio in the classroom, which is only possible if we have more schools with trained teachers to deal with the diversity of learners (ibid). At present, training to teachers is fragmented, uncoordinated and inadequate taking place in a segregated manner i.e. one for special children and another for students with general capabilities; both of them are preparing teachers for the segregated schools. Therefore, it is important that an inclusive teacher education program must be designed which can foster proper skills among teachers (ibid).

3.3.5 Organization of the Education System

In our country, there are different types of schools such as private, NGO schools and public schools are developing inequality by offering differential levels of facilities and support. Those having an access to private schools have higher possibility of success as compared to those who go to government schools. Therefore, it is important like many developed countries, the common school system policy must be place properly. There is also a lack of information within many

systems and often there is not an accurate picture of the number of learners excluded from the school system. Very often this leads to a situation where these learners do not have equal opportunities for further education or employment (Alam, K., 2006).

3.4 Major Shortfalls in Inclusive Education System

Inclusive Education system

The Inclusive education system has been introduced in very recent years and is being operated by NGOs in non-formal education settings and primarily in rural areas. There are most of the schools are pre-primary level. But there is also very insufficient government recourse for inclusive education system. The class room environment is not suitable for accommodating different types of disabled children. There is also an inadequate resource to early detection and intervention program. Each school has 60-70 seats but there is no system for the identification of the disabled children and mobilizing them to enroll. So many seats are falling vacant. Inadequate teacher training facilities and also trained teacher is needed for inclusive educational system. Lots of teaches have an interest in advancing training to enhance capacity and develop skills but the authorities (GOB and NGOs) are not interested. The Infrastructure of most of the Schools is not Physically Accessible such as ram instead of stairs, entrance of the class room, bench height, Wheel chair accommodation etc. There is no uniformed curriculum in the inclusive education system among NGOs, to accommodate different types of disabled children. Different organizations use different curricula developed by them. Sign language used in special schools for hearing and speech impaired children is in English so they cannot communicate with others (in family & community). Bengali singing has been developed recently but not yet practiced widely. There is also lack of relevant support systems (Extra session & IEP- Individual Education Plan), support system such as; Therapeutic and assistive technology. The teachers are not adequately qualified and trained. So it is a great challenge to the marginalized children especially physical disabilities enrolment in the inclusive educational system.

3.5 Prospects of Inclusive Education

According to UNESCO (2006) stated that in the report of inclusive education in Bangladesh, there is lots of opportunities to achieve success in introduce inclusive education. Major findings are as described that there is badly needed to developing a clear understanding of inclusive education and as well as political willingness. Also important thing is to identifying the existing myths associated with inclusive education practice and plan initiatives to gradually change opinion and attitudes. Necessary to providing for access for all (which imply changes in planning and implementation processes and financial allocations) and re-organizing the present education, administration and monitoring that goes beyond scorecards and classrooms and into the community. Inclusive education should realizing that providing some incentives (both material and non material) to the most vulnerable groups for short duration of time can enhance inclusion and also attempt should be made to collect reliable data on the magnitude and educational status of children with disabilities and the disparities between regions and types of disabilities. It is the time to concerted efforts to bring about the required changes in policy and legal provisions to support inclusion and put them in practice. Budgetary allocations for promoting the education of all children need to take into account the backlog created as a result of long neglect of the children from marginalized community. So that the initiating change in favor of inclusive education involves mobilizing opinion, and building consensus. But understanding inclusion is not just about including the excluded within the classroom but also about allowing full participation and ensuring inclusive responsive quality education for all students. The inclusive education core group should act as a technical partner of PEDPII for focusing on promoting inclusiveness in the quality components of the program. Large effort should be made to encourage parents of marginalized children to enroll the children in mainstream school by seeking the support of the community and teachers. Meaningful partnerships should be promoted to move towards education as a fundamental right of every child. A 'whole school' approach to school improvement is more effective in establishing change in schools, than training a few of the staff. Teachers should be allowed to use innovative teaching skills for inclusive educational system. So the NCTB should take the necessary steps in order to ensure that curriculum developers and all subject teachers engaged in the revision of textbooks are aware of IE concept and practice. Development of supplementary books in the ethnic language using Bangla script

will be helpful. Improved teacher training is a must. It should result in the creation of teaching-learning environments that are both welcoming and responsive to learning of all children. Organize study visits to other low resource countries in Asia and learn from their successful experiences with inclusive education. Involvement of the print and electronic media could initiate a public debate and build opinion in favor of inclusive education. The educational interventions of groups such as the street children need to go together with other interventions touching the overall life such as shelter and physical and psychological security, skill training etc. Education authorities should recognize the challenges of the schools with children from the Bede, hereditarily sweeper communities and sex workers and provide appropriate supportive measures. So there will be a systemic and organized inclusive educational system could initiate and starts enroll physical disabled children caused by cerebral palsy as well as other causes also.

The best choice of school for the child with physical disability depends on the nature, type and degree of mental impairment and physical impairment, as well as the facilities available in the area. "Inclusion," or mainstreaming the child in a regular public school classroom, may work well for the child with mild physical impairment. Separate classrooms or special schools may be needed for more severely involved children. An educational specialist either within the school system or from the community social services agency may be able to help the family navigate the various technical pathways that will ensure the best schooling available. If a person uses a wheelchair, conversations at different eye levels are difficult. If a conversation continues for more than a few minutes and if it is possible to do so, sit down, kneel, or squat and share eye level. A wheelchair is part of the person's body space. Do not automatically hang or lean on the chair; it is similar to hanging or leaning on the person. Using words like "walking" or "running" are appropriate. Sensitivity to these words is not necessary. People who use wheelchairs use the same words. Accept the fact that a disability exists. Not acknowledging this fact is the same as not acknowledging the person. People with physical disabilities are not "confined" to wheelchairs. They often transfer over to automobiles and to furniture. Some who use wheelchairs can walk with the aid of canes, braces, crutches or walkers. Using a wheelchair some of the time does not mean an individual is "faking" a disability. It may be a means to conserve energy or move about more quickly. The process of developing an educational plan for the children with physical disability begins with an assessment of the child's needs.

It has been found that from a multiple Indicator Cluster Survey, 3 per cent of children under 5 years, and 5 per cent of children under 10 years have disabilities (UNICEF & GOB, 1997). Poverty, malnutrition, low levels of maternal education and poor pregnancy monitoring were found to be the main causes of such disabilities (Zaman, Khan, Islam, and Durkin, 1992). As per World Health statistics the persons with disability s constitute about 10% of the population of any country. According to this estimate more than 13 million people of Bangladesh fall in this category. UNESCO (2006) indicates that as many as 80% of these children can be included in

regular mainstream education with minor adaptations. Only a small number who have severe impairments may need more specialized education.

Disability is seen as a developmental issue in any economy, as the disabled group is often being marginalized due exclusion from the society and thus leading to poverty. Inclusive Education approach doesn't only provide the basic human right to education but also dignity which is often being linked with the socio economic status. It is seen as a device for both access and quality education which are also fundamental aspirations of EFA and MDG action frameworks. Through, inclusive education the learners gets a chance for not only getting into the system but also a support to complete it successfully.

Inclusive education results in improved social development and academic outcomes for all learners specially disabled children as it provides opportunity to get exposed to the real world which leads to the development of social skills and better social interactions. It also provides platform to the non-disabled peers adopt positive attitudes and tolerance.

An important prerequisite for inclusive education is have respect for differences, respect for different learning styles, variations in methods, open and flexible curricula and welcoming each and every learner. A success of any learner is dependent on both school and community, but, both of them poses barriers in the implementation of the inclusive education policy. These barriers are both external and internal in nature and in order to facilitate inclusive education there has to have a modification in the environmental conditions, which includes the physical changes in the school buildings and increased number of schools (Pivik et al., 2002). Apart from that, very importantly there is a need to change the negative attitudes and more responsibility towards learners with special needs, which can be brought about by policy changes. There is a need to provide proper training to the teachers dealing with children with cerebral palsy, applying appropriate individualized pedagogy and assessment system.

The opportunity to create communities where all children as well as disabled children are permitted to learn together in inclusive schools is a realistic one. Children with physical disability will be the one of core group whose are going to take opportunity. The Educational for All initiative has significant moral support as well as political and economic backing. It thus provides a context to link the provision of education to children with disabilities to the broader effort for equity and full coverage to children and youth. This future will only become a reality when public policy requires every public school to provide a quality education to every child including those with special needs and disabilities. It is now time to move forward with determination so this goal can become a reality in the decade before us.

It has been found that the Ministry of Social Welfare, Ministry of Primary and Mass Education and Secondary and Higher Education; and the Ministry of Women and Children Affairs separately prepared their policy and plan and which is not at all harmonized with the International Concept of Inclusive Education and Education for All. So, a close coordination and joint effort among all the concern Government Ministries and Departments is needed to prepare an effective and uniformed action plan to ensure the education rights and opportunity for children with disabilities and individuals with special needs.

The concept of Inclusive Education (IE) system is a shift from the traditional welfare and service oriented practice of special/integrated education that was not appropriate to be a much effective and rights-based system. IE is a new concept and globally recognized but implementing this system is depending upon the values, attitude, and resources. A vast task is needed to be done to introduce effective inclusive education system to ensure education equity among all children. There is no example of successful implementation of IE in front of us as yet. The inclusive education for children with disabilities is no doubt a new dimension and it has valid logic for implementation in different society suited to its local socio-economic and cultural condition.

There is no doubt that inclusive education for physically disabled children must be needed at some point in their life. Whether it's in just the first few years of education or continuously

through their school career, these special programs will help them achieve their highest potential. When a child becomes older and begins formal schooling, the degree of services will vary from individual to individual. Inclusive education for disabled children promotes individuals to achieve a substantial degree of independence; however, in some cases some may need considerable assistance. Continuing therapy, regular or special education, counseling, technical support, community integration opportunities, recreation and possible personal attendants may be included in programs aimed at special education for physically disabled children. Besides special education for disabled children, a key factor is always being a supportive factor. Children with a severe degree of disability can still be functional and independent. Each year the number of students with physical disability attending colleges and universities is growing all over the world. The continuation of inclusive education for disabled children will expedite these students through higher education and into a world of independent living and accomplishment.

References:

Akter, S. & Rahman, M. (2004) Cerebral Palsy-clinical profile and predisposing factors. *Bangladesh Journal of Neuroscience*, 20(1), 9-15.

Alam, K.J (2006, December). *Education for Individuals with Special Needs: The National Institute of Special Education (NISE)*. Paper presented at the 26th Asia-pacific International Seminar. Retrieved from http://www.nise.go.jp/kenshuka/josa/kankobutsu/pub_d/d-252/d-252_10.pdf

Albert, B., A.K. Dube, Trine Cecilie Riis-Hansen. (2005) *Has Disability Been Mainstreamed into Development Cooperation?* Disability Knowledge and Research Programme, Norwich/London: Overseas Development Group, University of East Anglia/Healthlink Worldwide http://www.disabilitykar.net/research/thematic_main.html

Aneja, S., (2006). Evaluation of a child with cerebral palsy. The Indian journal of Paediatric. 71(2):627-634

Baker, N. & Selim, Y. (2005) *A HELP guide to Cerebral Palsy*. Istanbul, Turkey: Global Help.

Bailey, M. & Diana, (1997). Research for Health Professionals. F. A. Davis Company, Philadelphia.

Bower. (2001). *A randomized controlled trial of different intensities of physiotherapy and collative goal-setting in children with cerebral palsy*. Retrieved from http://www.refer.nhs.uk/viewrecord.asp?id=579

Carlson, C. S. (2002). 'The Bobath Concept', Occupational Therapy in Childhood. Where publishers Ltd, London.

Chaudhury, K. C. (2007). Symposium on Developmental and Behavioral Disorder. Indian journal of Paediatrics. 72(11):979-983

Cerebral palsy society of New Zealand (2004). Physical therapy for cerebral palsy. Retrieved from http://www.cpsoc.org.nz/types.htm

Cerebral palsy and Bangladesh (2006, September) *Cerebral palsy Magazine*. 4(3), 17-20.

Cerebral palsy source. (2007). *Physical therapy for cerebral palsy*. retrieved from http://www.cerebralpalsysource.com/index.html

Damiano, D. J. (2004). Physiotherapy management in cerebral palsy: moving beyond philosophies. Clinics in Developmental Medicine. 161:161-169

Finkelstein, V. (1994) *Getting There: Non-Disabling Transport*. Paper presented at Beckfoot School Bingley, retrieved from http://www.leeds.ac.uk/disabilitystudies/archiveuk/finkelstein/Transport%20-%20Getting%20There.pdf

Japan International Cooperation Agency, (2002). *Country Profile on Disability People's Republic of Bangladesh*, retrieved from http://www.jica.go.jp/english/global/dis/pdf/ban_eng,pdf

Keynes, M. (2006). No significant Improvement in Motor Function in Children with Cerebral Palsy following Intensive Physiotherapy or Hyperbaric Oxygen. Bobath Centre for Children with Cerebral Palsy. Retrieved from http://www.bobathlondon.co.uk/htm

Kabir, N., Rahman, N., (1996) *Four baseline surveys on prevalence of disabilities*. ActionAid. Dhaka, Bangladesh.

Khan, NZ & Ferdous, S. (2003). Shishu Bikash Network Report, 2000-2003. *Paediatric Neuroscience: Services & Research in Bangladesh*, Dhaka, Bangladesh.

Lewin, K.M. (2007) *Improving Access, Equity and Transitions in Education: Creating a Research Agenda*. Falmer: CREATE Pathways To Access Research Monograph No 1

Mc Conachie H, Smyth, D. & Bax, M. (2006). Services for children with disabilities in Europian countries. Conclusion & recommendations. Dev Med Child Neurol. 39(suppol 76): 5-7

Ministry of Education. (2004). *Educational Support for Children with Multiple Disability with Sensory Impairment, including Deaf blindness*. Dhaka: Yahia. G, M.

Palisano, R., Rosenbaum, P., Walter, S., Russel, D., Wood, E. & Galuppi, B. (1997). Development and reliability of a system to classify gross motor functioning children with cerebral palsy. *Dev Med Child Neurol*. 39, 214-223

Pivik, J., Mccomas J. & Laflamme M., (2002). Barriers and Facilitators to Inclusive Education, *Council for Exceptional Children*. 69(1): 97-107.

Stainbook, P. & Mcleod, K., (2005) Comperison of motor outcome after selective dorsal rhizotomy with and without preoperative intensive physiotherapy in children with spastic diaplegic cerebral palsy, *Paediatric Neuroscience*.36, 142-147.

Suresh & Swapna. (1997) Neurological Development. *Dev Med Child Neurol*, 39(76), 5-7

UN Enable (2008) *International Day of Persons with Disabilities New York: United Nations Enable* retrieved from http://www.un.org/disabilities/default.asp?navid=22&pid=109

UNICEF & GOB (1997). Multiple Indicator Cluster Survey. *Bangladesh Beuro of Statistics*. Bangladesh

UNICEF. (1999). Children with Disabilities-Educating Children with Disabilities. Education Update. 2(4):3-4

UNESCO. (2006). *An Assessment of Inclusive Education In Bangladesh*. India: Ahuja. A, Bangladesh: Ibrahim. M.

UNESCO. (2010). *Reaching the marginalized*. EFA Global Monitoring Report. Paris/Oxford: UNESCO/Oxford University Press.

United Nations Secretary General (2007) *Implementation of the World Programme of Action concerning Disabled Persons: the Millennium Development Goals and synergies with other United Nations disability instruments.* A/62/157. New York: UN General

Assembly retrived from
http://www.acfid.asn.au/resolveUid/8a441495dfd6915ffccfdb46a276edf6

UPIAS/Disability Alliance. (1976). *Union of the Physically Impaired Against Segregation and the Disability Alliance discuss the Fundamental Principles of Disability*. London: UPIAS/Disability Alliance retrieved from http://www.leeds.ac.uk/disabilitystudies/archiveuk/UPIAS/fundamental%20principles.pdf

USAID. (2005). Assessment of Educational Needs of Disable Children in Bangladesh. Dhaka.

World Bank. (2004). *Disability in Bangladesh: A Situation Analysis*. People's Republic of Bangladesh.

Zaman, S., Khan, Nz. & Durkin, M. (1992). Childhood Disability in Bangladesh. *Bangladesh Protibondhi Foundation*. Dhaka.