Writing a Thesis on Teaching challenges at autism schools – teachers perception

A thesis presented to the

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In partial fulfillment of the requirements for the degree of

MASTER OF EARLY CHILDHOOD DEVELOPMENT

21/04/2010

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Content page

Executive summary

Education is one of the fundamental human rights for all children. The right is equal for children with disabilities (CWD) also. So, integrating the children with Autism spectrum Disorder (ASD) into special education, mainstream education and ECD program is therefore a human rights and social justice issue. In Bangladesh the number of special school and inclusive school are very few. Although there are some special needs schools in the main Dhaka city areas, some of them are for the children with ASD. Due to insufficient constructive physical environments, low special educated teachers in this field and low trained up and poor education and learning opportunities make the quality of the teachers are not so high.

Educating children with ASD in special needs school needs high levels of skills, expertise and support due to individual needs and requirements. Certain key issues should be addressed for successful educational provision across the spectrum which includes gaining attention and motivating pupils; promoting social communication and social interaction; structured teaching and behavior management (ACCAC, 2000). More over there are some another factors are making this more challenging which also include Feelings of isolation, too little time with students, lack of administrative support, and increasing demands and contributing to teacher shortages. These challenges fail the teachers and subsequently fail to retain them when repeatedly remove from instruction and assign them to conduct assessments, attend meetings, complete paperwork, and work with other educators and the community. Teachers feel a need of administrator support, professional development, and more time with their students, and connections to resources and materials. This places a burden of responsibility on all teachers with ASD, whether in a mainstream or special school setting.

The present study was a qualitative phenomenological study due to exploratory nature. Researcher wanted to get as much information as possible that come as close as possible to knowing what it is like. How much the problems they face? The study aims to explore

8

the experience and perception of the teachers who are teaching the children with ASD at autism schools. Its purpose is also to develop hypothesis, concept and theory according to teachers view (Anderson & Bury, 1988). In this qualitative phenomenological study researcher has been able to understand teachers' insights of views, opinions, feelings and beliefs, within their own natural settings (Hicks, 2000). A sample of 5 autism schools, 5 principles, 5 specialists, and 40 teachers were selected for data collection. The researcher used purposive sampling for sample selection. Researcher selected only expert and trained personnel in this field of autism who are working for more than 2 years. For the purpose of this research, focus group sessions and semi-structured individual interview were chosen as research methods for generating information. These methods were supplemented with observation to validate or corroborate the messages obtained in the interviews and focus group sessions. Data generated in this study was analyzed by qualitatively. Both focus group sessions and semi-structured interviews were analyzed in three different but complementary ways. These were by group (summaries), by question (grid analysis), and according to selected themes (thematic codes).

This study shows that majority of the participants have satisfactorily knowledge about autism and the management of children with autism spectrum disorder at schools. They have included various challenges when teaching the children with autism spectrum disorder at schools. Teaching process at schools for autistic child is same like each other. There are very limited differences were found from the experiences of teachers. Some same activities of autism schools are use of choice board, drawing, singing, play, group play, self care activities like brushing, combing, dressing, etc. various challenges include aggressive behavior, repetitive behavior, stereotype behavior, compulsive behavior, Sensory processing dysfunction, Literal and visual thinker, sexual behavior, Low space of class room and play ground, parents attitude, schools rules, limited resources, Limited opportunities of training etc. for these kind of challenges they include various suggestions like Always engaged the child in purposeful activities, Avoid noisy child from working environment, Support each other in all activities, Negative rewards when necessary to avoid unwanted behavior, some times singing therapy plays a important role to get their

attention, and support from supervisor and specialist. They also include that different professionals has their own different roles in schools settings. Especially they included the name of occupational therapist, speech and language therapy, psychologist and child specialist. The parents who obey the rules of schools and maintain all suggestions then children are more improved and also they had limited behavioral problems. But the parents who do not obey the rules and do not maintain the suggestions the children then is hyper, they get less improvement and many behavioral problems they have.

Not all autistic children will become independent when they grow up. Teaching children is a difficult task. Now teaching autistic children is a lot difficult than teaching normal children. Teachers need to understand that autism is a learning disability. Of course teaching them is not impossible, but just rather a different kind of challenge. Teachers need to change their perspective in how they learn when teaching them. Teaching autistic children need to find out what methods of learning best help them. Teacher should also know the habits of autistic child and use that to advantage. Teachers should also realize that it will require a lot of patience teaching autistic children, since will surely need to repeat a lot of things before your autistic child will be able to learn. The study was undertaken against the background of present service provision by autistic schools in Bangladesh. There is no any government school which is running for autistic children in Bangladesh. This resulted in almost complete dependency on a non-governmental institute or organization. The selected five schools provide comprehensive management and services for the children with autism spectrum disorder.

Chapter – 1 Introduction

1.1 Introduction

"Child born as the torchbearer in a family, but when it born with any disability then it bears curse for its family, even the parents are treated as the result of great sin" (Werner, 1988). Now a days, this thinking has been changed enough in most of the countries of the developed world, but developing countries like Bangladesh yet now is not enough aware of disability. "In spite of various limitations like scarcity of resources, lack of professionals and intervening of technology, Bangladesh has given high priority of disability agenda. According to WHO statistics 10percent of the population of developing countries are disabled and Bangladesh is included" (Priestly, 2001).

The World Health Organization states that one in every 500 people suffers from autism. According to Autism Society of America, the most cited statistic is that autism occurs in 4.5 out of 10,000 live births. This is based on large scale surveys conducted in the United States and England. In Bangladesh around 0.28 million children are affected by autism. This figure indicates that one in every 500 children in the country is affected by autism. In India, one in 500 Indian infants has this syndrome or condition. Autism is found in every country and region of the world and in families, all of racial, ethnic, religious and economic background (Sylvia, 2003). In Bangladesh, a few special schools are working for autistic children. In this study, only five schools were involved. These included Social Welfare of Autistic Children, School for Gifted Children, Autism Welfare Foundation, Autistic Children Welfare Foundation, and Anondo Niketon European School.

Now autism is one of the common pediatric conditions. Intervention with autistic children at school is often in the form of play activities specifically designed to facilitate and support the child's self-help play, and learning skills. Beside the play techniques another globally used of sensory integrative techniques, IEP, facilitate communication, intensive training in activities of daily living and vocational activities (Graly, 1994 Hulton, 1994 cited in Case-Smith, 1996). The above techniques are fundamental by

which treat the children with autism. Autism is defined as a life – long development disorder primarily affecting communication and social skills, thought and behavior. It was "in 1943 that Leo Kanner, a child psychiatrist of the John Hopkins Medical School, gave the disorder the name or termed autism" (Case-Smith, 1996). Autistic children do not look different but what sets them apart is their apparent inability to relate to the environment. Autistic children look normal, so people find it difficult to accept them as disabled, they require special attention.

1.2 Disability in the international arena:

Our understanding of disability has been changed since the 1960s and 1970s with the emergence of the disability rights movements in high resource countries such as the UK and the USA (Hunt 1966; Driedger 1989). The United Nations (UN) declaration on the "rights of Disabled Persons" acknowledges the need for equal rights for disabled people in all nations (UN 1975). Disability is understood today as a human rights issue rather than one of charity or welfare. Autism is one of the term which also causes disabilities like communication, activities of daily living etc.

Disabled people's human rights are violated all over the world irrespective of wealth (DAA, 1998). This concern was raised on the 50th anniversary of the Universal Declaration of Human Rights in a document provocatively entitled 'Are disabled people included?' The UN Commissioner for Human Rights, Mary Robinson said:

> We know that persons with disabilities frequently live in deplorable conditions, and face physical and social barriers which prevent their integration and full participation in the community. Despite the adoption by the UN General Assembly of the World Program of Action concerning Disabled People, and the adoption in 1993 of the Standard Rules on the Equalization of Opportunities for Persons with Disabilities, it is clear that a great deal needs to be done (World Vision 2001:2). So it also shows a condition of barriers for the children with autism spectrum disorder in the family, community and society.

1.3 Disabilities in the low resource countries:

Ignorance, neglect, superstition and fear are social factors that throughout history have isolated disabled people from community life in some low resource countries. Historically, society has tended to ignore and exclude people with impairments from its mainstream (Pritchard 1963; Scholl 1986; Walker 1986 in Kisanji 1995b:183). This figure is not different for children with autism as well. In the wealthy nations most biologically based impairment is genetic, while in low resource countries it is a consequence of diseases and malnutrition (Barid and McConachie 1995b:15). Thus, the causes and consequences of impairment vary throughout the world due to socio-economic factors, as do policy responses.

Disabled people in the west are demanding independence and improved services, while disabled people in low resource countries struggle to survive (Joshua Malinga cited in Beresford 1996:553-567). So where struggle for survives is the matter then education in special school or autism school is questionable. However, across the globe most disabled people encounter disempowering barriers and scarce resources (Colerigde, 1993).

According to UN estimates, there are 500 million disabled people worldwide around 80 percent of whom live in 'developing' countries. 160 million experience some sort of mobility impairment, 20 million have no wheelchair but require one and 100 million are impaired due to malnutrition (DAA, 1995). Metts (2000) suggests that 'half a billion disabled people are, undisputedly, amongst the poorest of the poor in low resource countries' and are estimated to comprise' 15 percent to 20 percent of the poorest people in low resource states (Elwan 1999). This is considerably higher than estimated figures for the proportion of disabled people in the world population as a whole.

Reports of autism cases per 1,000 children grew dramatically in the U.S. from 1996 to 2007. Most recent reviews showed a prevalence of 1–2 per 1,000 for autism and close to 6 per 1,000 for ASD; because of inadequate data, these numbers may underestimate ASD's true prevalence. PDD-NOS's prevalence has been estimated at 3.7 per 1,000,

13

Asperger syndrome at roughly 0.6 per 1,000, and childhood disintegrative disorder at 0.02 per 1,000. The number of reported cases of autism increased dramatically in the 1990s and early 2000s due to largely attributable to changes in diagnostic practices, referral patterns, availability of services, age at diagnosis, and public awareness, though unidentified environmental risk factors cannot be ruled out. In India there are 116 persons in every 10,000 population are autistic (The Hindu, 2009).

Although there are a large number of children with autism spectrum disorder but disabled children in low resource countries are less likely to be sent to school based on the assumptions that are uneducable, that disclosure will stigmatize the family and affect the marriage prospects of siblings, or that they are not a worthwhile investment. UNESCO studies have estimated that 98 percent of disabled children in 'developing' countries are denied any formal education (cited in DFID, 2000a:3).

1.4 Children with autism:

Autism is a neural developmental disorder characterized by impaired social interaction and communication, and by restricted and repetitive behavior from the age of three years. Autism affects information processing system of the brain by altering the process of nerve cells, synapses connection and their organization. Autism has a strong genetic basis, in rare cases; autism is strongly associated with agents that cause birth defects. The prevalence of autism is about 1–2 per 1,000 people; the prevalence of ASD is about 6 per 1,000, with about four times as many males as females. The number of people diagnosed with autism has increased dramatically since the 1980s, partly due to changes in diagnostic practice; the question of whether actual prevalence has increased is unresolved.

Parents usually notice signs in the first two years of their child's life. The signs usually develop gradually, but some autistic children first develop more normally and then regress. Although early behavioral or cognitive intervention can help autistic children gain self-care, social, and communication skills, there is no known cure. Not many

children with autism live independently after reaching adulthood, though some become successful. An autistic culture has developed, with some individuals seeking a cure and others believing autism should be tolerated as a difference and not treated as a disorder (Case – Smith, J. 1996).

1.5 Screening and diagnostic procedure of autism:

Most of the time diagnosis is based on behavior, not cause or mechanism. Autism is defined in the DSM-IV-TR as exhibiting at least six symptoms total, including at least two symptoms of qualitative impairment in social interaction, at least one symptom of qualitative impairment in communication, and at least one symptom of restricted and repetitive behavior. Sample symptoms include lack of social or emotional reciprocity, stereotyped and repetitive use of language or idiosyncratic language, and persistent preoccupation with parts of objects. Onset must be prior to age three years, with delays or abnormal functioning in either social interaction, language as used in social communication, or symbolic or imaginative play.

There are several instruments of autism diagnosis. Such as the Autism Diagnostic Interview-Revised (ADI-R), Autism Diagnostic Observation Schedule (ADOS) and The Childhood Autism Rating Scale (CARS). The CARS is used widely in clinical environments to assess severity of autism based on observation of children.

Generally a pediatrician commonly performs a preliminary investigation by taking developmental history and physically examining the child. In many times diagnosis and evaluations are conducted with help from ASD specialists, like occupational therapist, speech and language therapist, doctors, pediatrician, psychologist by observing and assessing cognitive, communication, family, and other factors using standardized tools, and taking into account any associated medical conditions.

When different symptoms suggest generic cause then clinical generics evaluations also is done in autism diagnosis. Generally 40 percent causes of autism are genetic cause. The

diagnosis of autism is increasingly stable over the first three years of life: for example, a one-year-old who meets diagnostic criteria for ASD is less likely than a three-year-old to continue to do so a few years later. Moreover ASD can sometimes be diagnosed by age 14 months also. In the UK the National Autism Plan for Children recommends at most 30 weeks from first concern to completed diagnosis and assessment, though few cases are handled that quickly in practice. A 2009 U.S. study found the average age of formal ASD diagnosis was 5.7 years, far above recommendations, and that 27% of children remained undiagnosed at age 8 years. Although the symptoms of autism and ASD begin early in childhood, they are sometimes missed; years later, adults may seek diagnoses to help them or their friends and family understand themselves, to help their employers make adjustments, or in some locations to claim disability living allowances or other benefits. Under diagnosis and over diagnosis are problems in marginal cases, and much of the recent increase in the number of reported ASD cases is likely due to changes in diagnostic practices in the general medical practitioners. The increasing popularity of drug treatment options and the expansion of benefits have given providers incentives to diagnose ASD, resulting in some over diagnosis of children with uncertain symptoms. Conversely, the cost of screening and diagnosis and the challenge of obtaining payment can inhibit or delay diagnosis. (Filipek PA, Accardo PJ, Baranek GT *et al,* 1999)

In Bangladesh there are not found any statistical data like that on autism. Most of the time, the children with autism spectrum disorder are diagnosed by general pediatrician. One of the reason of that is the parents go to the medical professional for medication treatment. They take medicine long time but does not get more improvement then come to other professional individually. The pediatrician does not refer all time to the therapist or other professional due ignorance or business. There are very limited other professionals like speech and language therapist, occupational therapist, etc and more accessibility of pediatrician rather than other professionals. So proper screening in Bangladesh is a difficult matter for the parents with ASD.

1.6 Services for autistic children:

The prevalence of impairment is believed to be high in Bangladesh because of over population, extreme poverty, illiteracy, lack of awareness, and above all lack of health care services (CSID, 2001). Despite the government and NGOs working to improve the circumstances of disabled people in Bangladesh (NFOWD, 1999), the overall situation is still far from satisfactory, with disabled people given the lowest priority in any service provision (Momin, 1995). There are not enough medical professionals and there is a shortage of therapeutic staff such as physiotherapists, occupational therapist and speech and language therapist who can provide effective treatment and rehabilitation to people with disabilities (Momin, 1995). According to government statistics, only 25 percent of disabled people receive any services from government hospitals and 59 percent of disabled people receive no services at all from a qualified doctor (BBS, 1994). So, autistic children also do not get proper and sufficient treatment and rehabilitation facility.

1.7 How I became involved:

My own experience over the past 9 yeas of working at CRP inspired me to join the struggle of autistic children and become an advocate for political action through sharing my experience and writings. I was recruited by Hope Autism Centre in 2008 to work for autistic children at hope autism centre. I worked with teachers of autistic children. Then I observed some challenges of teachers during teaching at school. A question came to me that if I found the challenges of teaching at autism schools by a thesis then this finding would be valued and effective for the autistic children, their parents and the authority of the school. To be more valid of the thesis I am doing this as a part of my masters in early childhood development at BRAC University.

1.8 Statement of the issue or problem and research questions

Education is one of the fundamental human rights for all children (Anam, D. & Zaman. M. 2003). The right is equal for children with disabilities (CWD) also. So, integrating the

children with Autism spectrum Disorder (ASD) into special education, mainstream education and ECD program is therefore a human rights and social justice issue.

Although there is no total cure for autism, so children with autism become adults with autism and most with additional learning disabilities will require special care and supervision all their lives. People at the other end of the spectrum, however, and with ordinary intellectual ability, usually become partially or fully independent as adults but require specialist help as children. Educational interventions are designed to assist people with autism to achieve their full potential at all stages of their lives and to support and help parents and carers to accomplish this (Case-Smith, 1996). So, this statement gives us clear information about the needs of early education for the children with ASD. And there are no any substitute then special needs school.

Educating children with ASD in special needs school needs high levels of skills, expertise and support due to individual needs and requirements. Certain key issues should be addressed for successful educational provision across the spectrum which includes gaining attention and motivating pupils; promoting social communication and social interaction; structured teaching and behavior management (ACCAC, 2000). More over there are some another factors are making this more challenging which also include Feelings of isolation, too little time with students, lack of administrative support, and increasing demands and contributing to teacher shortages. These challenges fail the teachers and subsequently fail to retain them when repeatedly remove from instruction and assign them to conduct assessments, attend meetings, complete paperwork, and work with other educators and the community. Teachers feel a need of administrator support, professional development, and more time with their students, and connections to resources and materials. This places a burden of responsibility on all teachers with ASD, whether in a mainstream or special school setting.

The system of special education is not the same like traditional system. Reasonably here needs special training for individualized teaching and learning. Teachers have to make new educational tools, methods and also curriculum for the children with ASD. More

over the environment here the autistics children are taught is same like normal school. So, it disturbs to give full attention in their study due to over or less environmental stimulation. For that reason the teachers have to face many problems to managing and teaching them in their educational settings.

Without receiving appropriate and upgraded training on the particular educational requirements for this group, it would be unreasonable to expect teachers to provide appropriate education for children with ASD. Current teaching methods which are being employed for the majority of children with ASD most of them are inappropriate. For more successful education of children with ASD almost consistently require various inputs from a variety of specialist professionals, including educational psychologists, speech and language therapists and occupational therapists etc. In Bangladesh there is no access of all professionals in all school settings. So, the supports are not available. Teachers face more problems and are not able to deal their problems alone. Although there is severe scarcity of any research work on this issue before in Bangladesh. So, it is the research question that what barriers and challenges teachers face during teaching the autistic children at autism school? Researcher will try to find out the teacher's experience, perception and suggestions on this issue.

1.9 Significance of the study

In Bangladesh the number of special school and inclusive school are very few. Although there are some special needs schools in the main Dhaka city areas, some of them are for the children with ASD. Due to insufficient constructive physical environments, low special educated teachers in this field and low trained up and poor education and learning opportunities make the quality of the teachers are not so high. Parents in many times try to admit their children with ASD into mainstream schools and gather different negative experience. So they seek help with special needs schools (Sultana, I. 2007). It is difficult to manage the children with ASD in the normal educational environment. The proposed research will find out the teachers' difficulties when managing the children with ASD in the special needs schools. If this study can find out some challenges and barriers teachers

face and that is hampering in their teaching then it would be shown to the authority for taking possible steps for reorganize the environment and other necessary action. After having study findings the concerned authorities will try to solve the problems and then the autistic children and their families will be benefited. The structured educational system, constructive and organized environment will help to improve the attention of autistic children and teacher will feel very easy to manage their work at schools.

1.10 Specific objective

To find out the challenges of teaching at schools for autistic children

1.11 General objectives

- To know personal information like Attitudes, knowledge and professional training of all teachers
- To know the educational systems, environment, resources and school policy
- To know the teachers satisfaction on teaching at school
- To reveal teachers ways and means of managing the children with ASD at schools
- To find out the importance of highly structured education system for the children with ASD at autism schools.
- To collect suggestions from the teachers in improving the teaching system.

1.12 Who will get benefit from this research?

This research will be beneficial in various ways:

- Doctors, Physiotherapists, Occupational Therapists, Speech and Language Therapist, social workers, Psychologist, Special Teachers, the Authority of Schools, and other workers who work at autism schools or other places with autism may get benefit because by knowing this challenges and to manage them.
- The organizations who work with autism
- The children with autism spectrum disorder will be more benefited. When the teachers, professionals and schools authority will know this challenges and will try to solve this challenges then their improvement would be better.

2.3 Back ground of the study

In 2001, the population of Bangladesh was 129 million, with this figure expected to double by the year 2035 (BBS 2001b). The entire population inhabits an area of 144,000 square kilometers with a density of 900 people per square kilometers (ibid). Seventy seven percent of the total population lives in rural areas, although urban growth is rapidly increasing. For example, in 1961 the capital city, Dhaka, had a population of 0.5 million, rising to 9 million by 1977, with a predicted 18.5 million by 2014. The main reason for this urban proliferation is rural-urban migration (rural people looking for work and education in the cities), which accounts for somewhere between forty to seventy percent of the growth. The infrastructure and services have not been able to keep pace, either in rural or urban areas, with such rapid growth. Thus health care, education, housing, transport systems, water and sanitation, and waste management systems, have not kept up with the demands of the increasing population. So this scenery shows a big figure about the education facilities for the children with autism spectrum disorder. Although there are several autistic schools in the city area but this cost or expenses is so high beyond the capacity label of most of the parents. Where we know Bangladesh is one the poorest countries in the world, with estimated of 45 percent of the total population living below the poverty line (ILO, 2001).

For children, being a 'student' and 'learner' are one of their major roles. Involves all aspects / occupations; Productivity (i.e. school work), Leisure (forming friendships and play), Self Care (Mealtimes and Looking after self). It also involves all performance components: Physical, Social skills, Cognitive, Self esteem and confidence

2.2 Autism

Dr. Leo Karner is the first person in the world who first identified 11 children with autism. The term autism or Pervasive Developmental Disorders (PDD) is a chronic developmental disability with combination of sensory-motor and behavioral characteristics along with cognitive disabilities. In another way we can say it is a severely

handicapped group of disorders characterized by delays in the development of basic functions including socialization and communication. It begins at birth or within the first 2 ½ years of life. It is 2 to 4 times more common in boys than girls.

2.3 Causes of autism:

The exact cause of autism is uncertain. But recently some causes are being identified as responsive for autism. First of them are biologic and genetic factors. Some scientist believes that it is organic brain pathology. Some times the parent's inability to provide appropriate nurturing that caused social withdrawal behavior. One study suggested that a region on chromosome-16 is likely to contain a gene contributing to the development of autism (AJHG). Which include several parts of the brain are cerebellum, cerebral cortex, and temporal lobe in autism. The disorder may result from the failure of various parts of the brain to work together. One study suggested that a region on chromosome-16 is likely to contain a gene contributing to the development of autism (AJHG). A French team of scientists recently has identified two mutated genes that appear to cause autism. Both genes are located on the X-chromosome, which makes sense. Some other factors are damage to the brain, perhaps prenatally, through this has not been conclusively proved, genetic or chromosomal abnormality, viral agents' metabolic disorders, immune intolerance, and perinatal anoxia (Ornitz, 1989).

One model by Jennifer's for the uncertainty over the causes of autism by suggesting a final common pathway (following figure). This model shows how different causes, some of them unknown, can result in damage to areas of the brain responsible for the development of normal social function, communication and play. As mentioned in significance section that in Bangladesh there is an extreme lake of research on autism so that this model is supportive to know the exact causes of this disorder. The following model shows how different factor such as genetics, viral infections, birth complication and other factor responsible child's brain damage. As a result, the brain becomes damaged and occurs a problem in a child's communication, normal development

sequence of physical, cognitive, emotional, social skills. Autism condition also overlaps with mental handicap condition.

| Genetic factor | Viral infections | Pregnancy/birth Complications | Other causes |

Brain Damage

Final common pathway

Autism (Social, Communication and Obsessionnal difficulties)

Overlap

Mental Handicap (Slower development in almost all areas)

Figure A: Causes of Autism
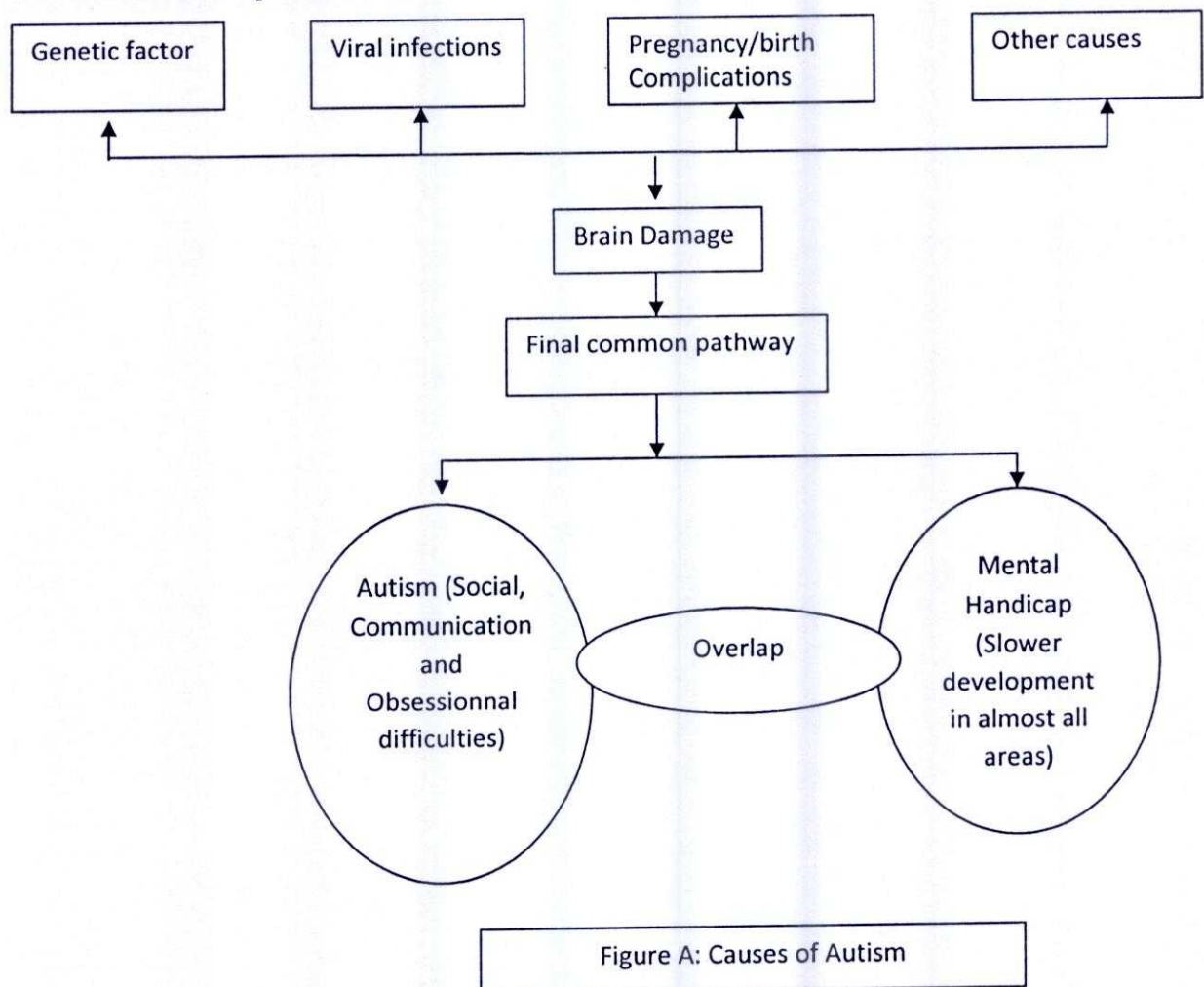
2.4 Characteristics of autism:

There are five main feature will make sure us about the diagnosis of autism. These will include disturbance in relation of person and object, disturbance in communication, disturbance in sensory processing, disturbance in functional motility, and disturbance in normal development of a child.

Some times parents complain that child does not playing with other children, lacking a social smile, limited or fleeting eye contact, flapping of the hands and spinning

themselves around, poor understand or no language and remain non-verbal, receptive language, shows unstructured play with toys, always live in his or her own life, some times over concentrate or no concentrate, imitate others, child seeks some specific textures, odors, or shiny objects, child shows clumsiness, sometimes walking on their toes, pacing up and down, twirling string, tearing paper, flipping light switches on and off.

2.5 Screening tools of autism:

Developmental screening tools like Childhood Autism Rating Scale, Autism Diagnostic Interview-Revised and Giliant Autism Rating Scale, Autism Behavior Checklist and Autism Diagnostic Observation Schedule-Generic can recognize the child with PDD or autism.

2.6 Prognosis:

"There is no cure for autism. Children with autism spectrum disorder become adults with some abnormalities and most with additional learning disabilities with requiring care and supervision all their lives. People at the other end of the spectrum, however, and with ordinary intellectual ability, usually become partially or fully independent as adults but require specialist help as children. Interventions are designed to assist people with autism to achieve their full positional at all stages of their lives and to support and help parents and carers to accomplish this" (Case-Smith, 1996).

No drug or other treatment can "cure" autism, but early and intensive treatment of abnormal sensation, behavioral and communication difficulties has been shown to lead to significant improvement. Here Occupational Therapist plays a significant role in Autism management. Occupational therapist uses various treatment approaches like Sensory Integration, Neuro-developmental, Occupational role and functioning, sensory diet (variety of activity and adaptations), and behavioral modification. Beside the treatment of autism a special needs educational program or IEP is very essential to teach the child.

2.7 Education and special school:

Education is the basic need for every human being. Nobody is dared to disagree that without education there is at least any single means and media to develop the quality of human life. For survival, protection and development of human life living, education and only education is the way. The government of Bangladesh attaches high priority to "Education for All". But unfortunately the issues of education for the disabled remain in neglected and uncovered. For educating people with disabled a conductive atmosphere and environment is necessary. Recently the government has announced that every school has to admit the disabled in the natural settings beside normal child and will have to give special care in school. Special education is one of the most effective methods for autistic children to maximize their functional independence. Special education is a profession focused on improving instructional arrangement and improving for teaching exceptional children and adults. To be successful special education programs must involve parents as much as possible in the special school (Heward & Orlansky, 2002).

School is a place where children go to be educated. And special means different from what is normal (Wehmeier, 2002). A special school is maintained by a form of educational intervention involving appropriate facilities, specialized methods and materials, and special trained teachers (Hornby, 2000). A special school is important for children with autism because educational planning for students with autism often addresses a wide range of skill development, including academics, communication and language skills, social skills, self-help skills, behavioral issues and leisure skills. It is important to consult with professionals trained specially in autism to help your child benefit from his/her school program. However, keep in mind, even the most well intentioned advice may generate inappropriate curriculum models and impair the child's ability to develop to his/her fullest potential. That is why it is important to get a wide range of teacher's opinions and keep a close eye on your child's progress. "The special school we'd like is beautiful, Comfortable, Safe Listening, Flexible, Relevant, Respectful, without walls" (Semeardon, 1998).

Highly structured teaching programs have been claimed to produce the greatest gains. There are several reasons why this may be so. First, the social problems in autism are such that, if a teacher is not actively initiating interaction and being directive, a child with autism may simply drift away from social contact into a pursuit of repetitive patterns of behaviors. Such repetitive behaviors, by definition, allow very little learning of new information. Secondly, the highly structured approach starts from the assumption that every task should be broken down into simple and clear steps, with each goal clearly defined. Children with autism seem to take to such a methodical approach. Finally, highly structured teaching may work because children with autism seem to prefer predictability. They like the fact that, for example, on Wednesday it is cooking in the morning and art in the afternoon, while on Thursdays it is maths in the morning and music in the afternoon. Sudden and apparently unexplained changes in the timetable can lead to tantrums or distress. Structure and predictability of course still need to leave room for flexibility and spontaneity. Indeed flexibility may need to be specifically worked at so that children with autism do not end up totally unprepared for the 'real world'. Certainly attempts to teach 'social skills' in an inflexible way can be self defeating, as normal social behavior is by definition inherently flexible (Cohen, S. B. & Bolton, 2000).

Barnard, J. et al (2002) report in his research for Autism Awareness Week 2002 reported one in three children in the special schools surveyed has educational needs related to autism. Forty four percent of schools which identified children with ASD say that significant numbers of them are not getting the specialist support they need. Fifty five percent of those responding felt that support was not forthcoming because of problems or delays with diagnosis or statementing. Around a third (30%) of respondents mentioned insufficient resources; both human and financial. Forty seven percent of those responding would like to see training and advice provided by or through the LEA. Thirty one percent of schools with pupils with autism spectrum disorders has no speech and language therapy. Three quarters (72%) of schools were dissatisfied with the extent of their teachers' training in autism. There is no evidence of LEAs centrally recording staff training so it is difficult to know the extent of autism specific training in schools. In

schools identified as having pupils with autism spectrum disorders, only 22 percent of teachers had received some autism-specific training but the majority only for between one and four hours. One in five schools (21%) with students with autism or Asperser syndrome has no teachers with autism-specific training at all.

2.8 Issue of disabilities and education:

Bangladesh is one of the most densely populated countries of the world with population density 854 per sq km. Total population is126.8 million and sex ratio is 106 males per 100 females. Eighty percent (80%) of the population lives in rural areas. Forty-seven percent (47%) of the population lives under the poverty line, while twenty-eight percent (28%) live in abject poverty. As a result Bangladesh is challenged by poverty, illiteracy, unemployment, lack of health awareness and health services, as well as the denial of many basic human rights. In Bangladesh, the problems of disability are deep rooted and complex.

Though disability is a major social and economic phenomenon in Bangladesh, but there is hardly any reliable data in this regard to reveal the actual number. As a result, But it is assumed that the prevalence of disability in Bangladesh is not less than the WHO estimation (10%) for the developing countries. The officially recognized figure is about 130 million.

However from the available data and information of Bangladesh Burea of Statistics (BBS, 1998), based on health and medical perspective, proportional prevalence of disability/impairment of different categories at all ages are visual 31.3%, physical (including leprosy and goiter) 35.8%, hearing and speech 28% and Mental Retardation 4.9%. It is very difficult to elaborate the majority causes of disability in Bangladesh, as most of those causes are congenital and unknown. The known common causes of disabilities in the country are lack of awareness, malnutrition, industrial and traffic accidents etc.

There are no any statistical data on autism until now. A comprehensive survey has yet to take place to determine the prevalence of autism in Bangladesh. However it may be convenient to look into the statistics of India, which is believed to illustrate the situation of the Indian subcontinent. Fortunately, with a 1 out of 500 rate, we lag behind many developed nations like Denmark, Finland, the US and the UK. Nevertheless, this must not be misunderstood. Firstly, the actual figure for Bangladesh remains to be determined. Second, the rates are rising rapidly (Nighat, 2006). Statistics by Country for Autism (2010) mention that there are 282,680 children are autistic in Bangladesh within 141,340476 people.

The psychosocial and Human Rights situation of disability in the country is far below than the minimum acceptable standard. PWDs in Bangladesh have been facing a strong difficult situation in their day-to-day lives, which badly impairs their socio-economic and cultural activities as well as the basic rights and facilities as human beings and/or complete citizens of the country.

2.9 Access to special education in Bangladesh:

Appropriate special schools are not available for the majority of PWDs in Bangladesh, particularly those living in rural and poor urban areas. Although there are some schools for the children with special needs but these are not more accessible due to lack of facilities, resource teachers and unaffordable tuition fees. Most of the educational institutes are not accessible for wheelchair users. Discrimination and ridicules by others are common phenomenon for students with disabilities in Bangladesh. Only 15 to 20 thousand disabled children receive education in special and integrated institutions – representing significantly less than 1 percent of the estimated number of school age children with disabilities (CWDs). There is no provision for governmental support to the disabled students of all categories where there are many programs like food for education, total literacy movement etc. run by the government to promote education for mass community. Many parents create barriers for disabled students, as they do not want their children to study along with any disabled students. This is the actual scenario of

access to education in Bangladesh for the children with autism spectrum disorder also (Anam, D. & Zaman, M. 2003)

2.10 Comprehensive existing educational Programs for Young Children with ASD

Education may be defined as the fostering of acquisition of skills and knowledge to assist a child to develop independency and personal responsibility; it does not include only academic learning but also include other skills including socialization, adaptive skills, communication, behaviors, and generalization of abilities through different environments. Physicians and other clinicians is often a person in their position to guide families, social persons to evaluate the appropriateness of the educational services that are being offered at school (Center for Mental Health in Schools at UCLA, 2008).

Last two years, there had been much improved in the side of educational research and program development for the children with ASD. There was several model discussed in early childhood educational program with ASD. All the model programs were categorized as behavior analytic, developmental, or structured teaching on the basis of the primary philosophical orientation.

Although there was different programs but they relatively emphasis on particular strategies, they share many common goals, and there is a growing consensus that important principles and components of effective early childhood intervention for children with ASDs include the following:

Early identification and intervention is the first priority in the program. In the intensive intervention the child should be actively engaged at least 25 hours per week and 12 months per year. There also should have systematically planned and developmentally appropriate educational activities to fulfill the identified objectives. Teacher and student ratio should be 1 on 1and some group instruction with typical peers. The program should engage the parents in activities. Increase the opportunities of interaction with other typical peers to address specified educational goals. A continuing evaluation tool will

observe the change of the child. In the environment of teaching there will have a high degree of structure in predictable routine, visual activity schedules, and clear physical boundaries to minimize distractions; implementation of strategies to apply learned skills to new environments and situations (generalization) and to maintain functional use of these skills; and use of assessment-based curricula, functional and spontaneous communication; social skills of joint attention, imitation, reciprocal interaction, initiation, and self-management; functional adaptive skills that prepare the child for increased responsibility and independence; reduction of disruptive or maladaptive behavior by using empirically supported strategies, including functional assessment; cognitive skills, such as symbolic play and perspective taking; and traditional readiness skills and academic skills as developmentally indicated.

Different kinds of strategies are used in educational program at autism schools to increase communication, social skills and reduce interfering maladaptive behavior including applied behavior analysis, which is based on the principles of learning derived from experimental psychology research to increase and maintain desirable adaptive behaviors, reduce interfering maladaptive behaviors or narrow the conditions under which they occur, teach new skills, and generalize behaviors to new environments or situations. Behavioral modification or Functional behavior analysis is an important aspect of behaviorally based treatment of unwanted behaviors. Reinforcement is the tool to modify the target behavior such as adult attention, a desired object, activity, or sensation, and escape from an undesired situation or demand.

TEACCH method is another strategy means structured teaching. It include organization of the physical environment, predictable sequence of activities, visual schedules, routines with flexibility, structured work/activity systems, and visually structured activities.

To remediate key deficits of the child there is used Developmental models in imitation, emotion sharing, theory of mind, and social perception by using play, interpersonal relationships, and activities to foster symbolic thought and teach the power of

communication. Different Relationship-focused early intervention models are also used in education program including Greenspan and Wieder's developmental, individual-difference, relationship-based model, Gutstein and Sheely's relationship-development intervention (RDI), and the responsive-teaching (RT) curriculum.

Speech and Language Therapist, physical therapist and occupational therapist are also the key personnel in the educational settings; therapist uses different kind of approaches to increase communication skills in children with ASD. Most common approach is educational and naturalistic behavioral methodologies (e.g., DTT, verbal behavior, natural language paradigm, pivotal response training, milieu teaching) and developmental-pragmatic approaches (e.g., Social Communication Emotional Regulation Transactional Support, Denver model, RDI, Hanen model). Some alternative communication system includes gestures, sign language, and picture communication programs. Occupational therapist works to increase self-care skills (e.g., dressing, toileting, brushing, feeding, manipulating fasteners, using utensils, personal hygiene etc) and academic skills (e.g., cutting with scissors, writing, reading, listening etc), assist in promoting development of play skills, cognitive skills, perceptual skills, gross and fine motor skills, modifying classroom materials and routines to improve attention and organization, and providing prevocational training.

A social skills curricula and guidelines are necessary to increase social skills in school programs and at home. Here is necessary to include Social skills groups, social stories, visual cueing, social games, video modeling, scripts, peer-mediated techniques, and play and leisure curricula to support the program. The entire program in class room settings should be based on the sound theoretical knowledge, methodology and empirical study of efficacy.

Chapter – 3 Methodology

3.1 Introduction:

The present study was a qualitative phenomenological study. Due to exploratory nature of the study the qualitative methodology has been selected for this study. Here researcher followed a systematic method of inquiry, and thus also followed the scientific method of problem solving to a considerable degree. Qualitative research proceeds in an inductive process in developing hypothesis and theory as the data clarify. Here researcher has collected all data himself. The techniques of data collection are document review, observation, and interviews. From the phenomenological study it is known that this describes general outlooks that exist. This out look is one where main interest is in understanding the barriers of teaching of autistic children at autism school from the research participants' points of view. The idea of phenomenological is in simple words, about studying phenomenon. Phenomenon can be events or things that happen or beliefs or attitudes of teachers with autistic children at autism schools. Qualitative researcher knows that each person will have different perspectives. So, a qualitative researcher who takes a phenomenological perspective is interested in studying phenomenon as they know the variety of perspectives that exist.

In taking a phenomenological perspective when studying the experiences of the teachers of autism schools, researcher wants to understand as much as he can from the teacher of autism schools about what it is like to be them. Researcher wanted to get as much information as possible that come as close as possible to knowing what it is like. How much the problems they face? In qualitative study researcher try to identify the meaning of people and place on the events, people and structures in their lives. In this study researcher tried to understand teachers' perceptions, assumptions, judgments, values within the context of their activities at autism schools with children with autism spectrum disorder. Importantly researcher has tried to understand all of the different possible meanings of barriers and problems that teachers with children with ASD are facing during teaching at schools.

3.2 Study design:

In this research the phenomenological design tried to explore the perception of the teachers who are teaching the children with ASD in autism schools. Here researcher explored the challenges and barriers of teaching the autistic children at autism schools. The study aims to explore the experience and perception of the teachers who are teaching the children with ASD at autism schools. Its purpose is also to develop hypothesis, concept and theory according to teachers view (Anderson & Bury, 1988). In this qualitative phenomenological study researcher has been able to understand teachers' insights of views, opinions, feelings and beliefs, within their own natural settings (Hicks, 2000).

3.3 Sample:

Sample means the population who were included in research by the fulfilling of inclusion criteria. Although researcher knows that the ideal sample size is large enough to serve as an adequate representation of the population about which the researcher wishes to generalize and significant enough to be selected economically- in terms of subject availability, expense in both time and money, and complexity of data analysis but there were not possible to take more sample due to unavailability of autism school in Bangladesh. A sample of 5 autism schools, 5 principles, 5 specialists, and 40 teachers were selected for data collection.

3.3.1 Types of sampling:

The researcher used purposive sampling for sample selection. Researcher selected only expert and trained personnel in this field of autism who are working for more than 2 years. It is very common to think that the more years of working experience and relevant training persons would be expert to explore rather than less working experience and training.

3.3.2 Procedure of sample selection:

At first researcher selected the schools which are only for the children with autism spectrum disorder. Then find out the schools which are running for more than 2 years and the principle and specialist both are working for more than two years. The schools would be selected considering chronological age of years. The teachers also were selected considering years of experience who are working for more than two years. In Bangladesh there are very few schools and teachers who are working for more than three or more years. Another one reason to select them is the ability to give the sufficient and effective answer for the research due to working experience.

3.3.3 Participant inclusion criteria:

The school which are running for more than 2 years, the principle, specialist and teachers who are working for more than two years.

3.3.4 Participant exclusion criteria:

The schools which are running for less than 2 years, the head masters/principles and teachers who do not have working experience in the field of autism for more than two years.
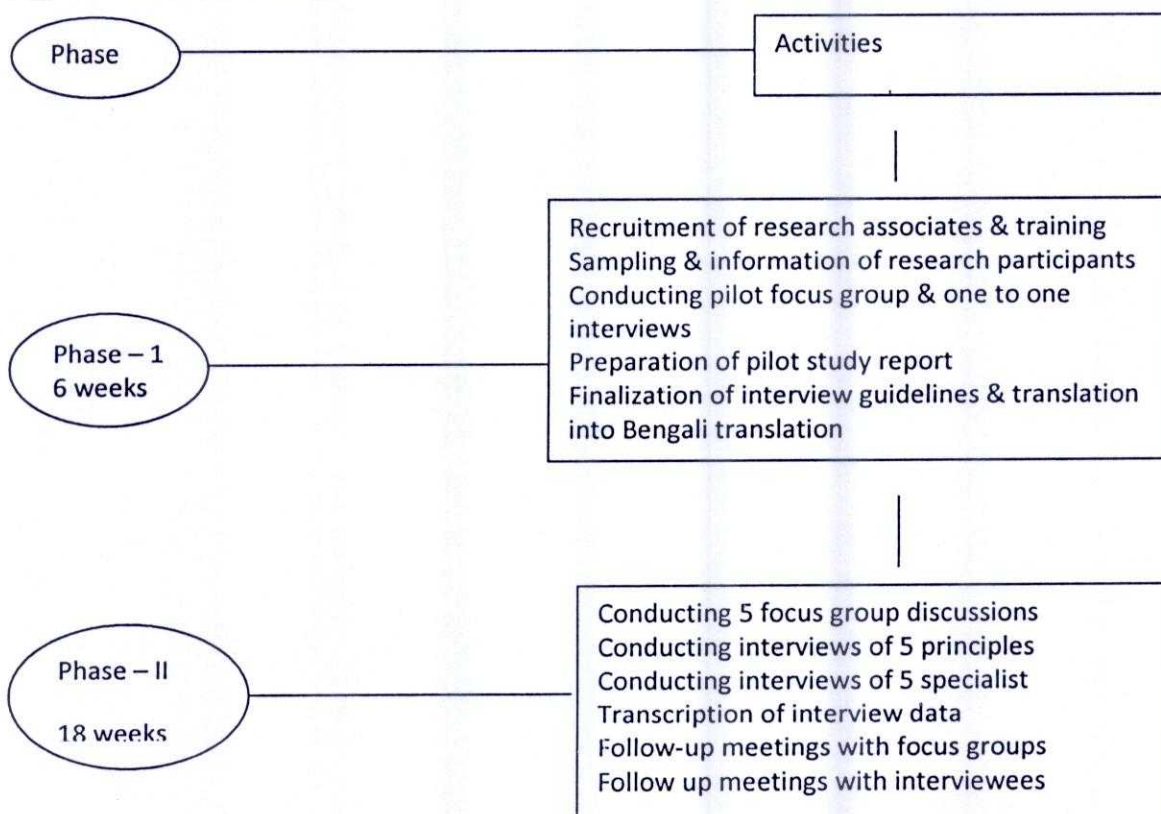
3.4 Setting:

The study was conducted in the setting of selected autism schools.

3.5 data generation schedule:

The data generation schedule was divided into two consecutive phases: a preparatory phase and a fieldwork phase, together covering 24 weeks.

Figure – field work schedule

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┌─────────┐                                    ┌──────────────────────────────┐
│  Phase  │────────────────────────────────────│  Activities                  │
└─────────┘                                    └──────────────────────────────┘
                                                              │
                                               ┌──────────────────────────────────────────┐
                                               │ Recruitment of research associates &       │
                                               │ training                                   │
                                               │ Sampling & information of research          │
                                               │ participants                                │
┌──────────┐                                   │ Conducting pilot focus group & one to one   │
│ Phase – 1│───────────────────────────────────│ interviews                                  │
│ 6 weeks  │                                   │ Preparation of pilot study report           │
└──────────┘                                   │ Finalization of interview guidelines &      │
                                               │ translation into Bengali translation        │
                                               └──────────────────────────────────────────┘
                                                              │
                                               ┌──────────────────────────────────────────┐
                                               │ Conducting 5 focus group discussions        │
┌──────────┐                                   │ Conducting interviews of 5 principles       │
│ Phase – II│──────────────────────────────────│ Conducting interviews of 5 specialist      │
│          │                                   │ Transcription of interview data             │
│ 18 weeks │                                   │ Follow-up meetings with focus groups        │
└──────────┘                                   │ Follow up meetings with interviewees        │
                                               └──────────────────────────────────────────┘
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3.6 Ethical issues

Research protocol was submitted for approval to research committee. After permission of research mentors, the researcher started his work. At that time researcher submitted a written application along with the permission letter of BRAC University to the authority of the selected schools for data collection from observation, interview with principles, specialist and teachers. When researcher received permission from the authority of the schools then contact with them to select the date & time for data collection. After confirm date and time researcher completed his data collection within the selected time frame. The researcher has taken consent from every single subject by informed consent form (appendix - 2) to participate in the study.

Participants were informed that they were free to decline answering any questions during the study and were free to withdraw their consent and terminate participation at any time,

which would not affect in their service at autism schools and facilities from the service. Subject had the power to discuss their problem with the authority of the schools. Before starting interview, the researcher always asked the physical and mental health status or condition, and also their fitness to share their perspectives.

3.7 Methods of data collection:

For the purpose of this research, focus group sessions and semi-structured individual interview were chosen as research methods for generating information. These methods were supplemented with observation to validate or corroborate the messages obtained in the interviews and focus group sessions (Rose, 1998 cited in Robson, 2002:12).

3.7.1 The focus group method:

Focus group is simply "a technique that collects data through group interaction on a topic determined by the researcher" (Morgan 1996 in Morgan 1997:6). Focus groups have been defined thus,

The contemporary focus group generally involves 8-12 individuals who discuss a particular topic under the direction of a moderator who promotes interaction and assures that the discussion remains on the topic of interest (Steward and Shamandansi 1990:10).

There are disagreements among researchers about the most appropriate size of focus groups. Some advocate groups of four to twelve people (with six to eight people the preferred norm). For the purposes of this study five focus group sessions were conducted, each consisting of eight people. It was found during the pilot study that when the focus group size was larger, some participants felt unable to take part in the discussion.

The purpose of using a focus group in this research was to collect primary data (Kitzinger 1994) and explore participants' beliefs, ideas and opinions about barriers to their integration at a community level. A particular strength of focus groups is said to be their capacity to 'turn the interaction in the interview over to the participants themselves' (Morgan 1997:11), thus giving participants more control over the direction of the

research. Generally focus groups are led by a 'moderator' who keeps the participants 'focused' on a particular topic. Alan Johnson has noted that the focus groups can be,

A 'transformational act', raising consciousness, and empowering participants, rupturing rather than reproducing underlying relations of exploitation and domination (1996:517)

He also states that:
The focus group gives the researcher the opportunity to study the individual not as the isolated nomad but as part of a collective (522).

Krueger has noted that:
Focus group is to obtain information of a qualitative nature from a predetermined and limited number of people. Focus groups provide an environment in which disclosures are encouraged (1994:15).

In the context of this study both Johnson and Krueger's notes are applicable, as the focus group information is used as a baseline for the research (Kitzinger 1994). Also, research participants are able to develop their confidence taking part in face to face interaction with similarly impaired people. Information from the focus group discussions was used to prepare individual interview guidelines. The focus group discussions allowed a depth of exploration as to 'why' certain things happened in the autism schools as a challenge of teaching. Focus groups allowed the researcher to interact directly with the respondents and share their experiences, providing opportunities for the interpretation of responses. In addition it is possible for the researcher to observe non verbal signals and signs such as gestures, smiles or frowns which might supplement verbal responses. Focus group allows respondents to react and build upon the issues raised by other group members in ways not possible in individual interviews. The moderator took care to avoid any single respondent dominating the discussions and endeavored to create a lively environment where everyone could participate.

Conducting the focus groups:

Discussion took place in selected autism schools. The researcher and other research associates kept a written record and supervised a tape recording of the full discussion, thus freeing the moderator to concentrate on the group. No data relating to personal circumstances was requested from participants during the focus groups because of a concern that this might be inhibiting in a group setting. Researcher started by explaining the purpose of the focus group sessions and asked all participants to introduce themselves and put on a name tag. Discussions concentrated on the following themes identified the pilot study:

- Experiences of personal teaching of children with ASD
- Experiences of family and social life within the community
- Experiences of integration of children with ASD in educational and social activities
- Experiences of managing challenging behavior of autistic child at school
- Experiences of highly structured education system for the children with ASD at autism school and its importance.
- Suggestions from the teachers in improving the teaching system.

The focus group sessions took on average one hour in each discussion. There are five focus group sessions were arranged for five autistic schools. In general most the all members of focus group were more cooperative in the discussions. In two sessions there were two members in quite in discussion then moderator tries to improve her voice by encouraging and stimulatory speech.

3.7.2 School environment Observations:

Classroom observations helped to confirm or deny the information gathered from the teachers regarding what challenges they are facing in class rooms and what strategies they were utilizing to mitigate that challenges. Taylor and Bogdan (1998) pointed out, "If researchers do not directly observe people in their everyday lives, they will be deprived

of the context necessary to understand many of the perspectives in which they are interested".

Disadvantages of this type of research included issues documented to be weaknesses of interviews: Two main threats to the validity of observation and interview studies are observer bias and the observer effect. For example, the very presence of the researcher in the setting may create potential problems. The situation may be 'seen' differently than it would have been through the eyes of a different researcher (observer bias) or may be a somewhat different situation than it would have been if the researcher were not present (observer effect). Although these problems are not unique to qualitative research, they are potentially more serious because of the more intimate involvement of researcher and participants (Gay & Airasian, 2003).

Other disadvantages of utilizing interviews included the fact that interviewees may have said what they thought the interviewer wanted to hear rather than directly answering the posed questions. Time constraints could be a stumbling block of using interviews, both for the interviewer and the interviewees; however this did not seem to affect the interviews in this research study. Enough information was gathered from the interviews to gain saturation and to provide thick descriptions of the information being sought. This was accomplished using interviews with each participant and extended time being spent with the teachers during classroom observations (Berg, 2004; Gay & Airasian, 2003; Creswell & Miller, 2000).

Conducting the school environment observation:
Researcher performed the role of an observer and did not try to be obtrusive. The researcher did not talk to participants (teachers and students) but only observed what they were doing. Here researcher observed how teacher conducting the class, how the students or children responded to them, what is the problem the teachers face, what is the problem the children face, overall environment of the class etc. researcher will sit in the back of the children and will not make any sound. Researcher will also observe the school

location, class room arrangement, resources, recreational facilities, teachers' involvement in other activities etc. The overall observation session would be conducted for full school session of one shift. Generally one shift is run for 3 to 4 hours in a day.

Site visits or classroom observations helped to compare what had been said in the FGD with evidences in the classroom, such as picture schedules, structured teaching activities, classroom materials and use of other "best practice" strategies. As part of the interview process, teachers were asked for permission for the researcher to make a classroom visit for observation of the environment to aid in understanding the challenges in the classroom. Observations lasted about half an hour each and field notes were kept. This data was utilized, along with that from the teacher FGD, to help address the research questions. Giangreco and Taylor (2003) stated, "Education research is not like laboratory research. Unlike human organs, plants or cells, human beings are social actors who exist in complex and multifaceted social and cultural environments. People are not passive objects that can be understood in sterile laboratory or controlled conditions". Classroom observations helped to shed light on the experiences of each teacher in their "Complex and multifaceted environments."

3.7.3 The individual interviews:

Cohen and Manion (1994) refer to four kinds of interviews that can be used as research tools: the structured interview, the semi-structured interview, non-directive interview and the focused interview. The structured interview uses closed questions and the content and procedures are determined in advance. The semi-structured interview deals with open questionnaires and provides grater freedom and flexibility. The non-directive interview involves minimal control, where as in a focused interview, the researcher has more control (Merton et al., 1956 cited in Robinson, 2002:283). There are advantages and disadvantages to using each of these interview tools. Researcher has used semi structured interviews for this study to generate data that is required for answering research questions.

Ferguson (2000) stated "Qualitative research can empower participants often simply by letting them tell their story". Similarly, Gregson (1998) pointed out, "Qualitative researchers use natural settings as sites of study, place more emphasis on meaning and process, are more concerned with a holistic understanding of phenomena, and try to make the familiar strange or the strange familiar". So, the setting for the interviews was not as important to answering the research questions, as was the setting for the classroom observations. "Qualitative and participatory action research methodologies share a deep appreciation of the subjective experiences, perspectives, and views of people who traditionally have been the 'subjects' of research" (Giangreco and Taylor, 2003). It was important for interviewees to feel free to tell their stories, feelings and perceptions in a comfortable environment that assured confidentiality.

In-depth interviews helped to shed light on attitudes, perceptions and thought processes that were not directly observable and helped us to understand phenomenon from the participant's perspective (Gregson, 1998). Interviews gave participants a voice (Hiller & Diluzio, 2004). The interviews provided information to those responsible for supporting the teachers to understand their challenges within the classrooms. Taylor and Bogdan (1998) found that "Interviewing multiple informants lends itself to building general theories about the nature of social phenomena" (p. 91). It was important to select multiple participants, each of who were able contribute to the overall body of information being sought.

Some disadvantages to this approach included the fact that those being interviewed may have said what they thought needed to be said rather than what they actually felt. They may have been reluctant to participate if they felt judged in any way. Interviews alone could not provide the entire context to answer the research questions. Causal relationships may have been assumed or implied by the interviewees where no causal relationship actually exists. "For the social sciences, the social and cultural contexts of the phenomenon studies are crucial for understanding the operation of causal mechanisms" (Maxwell, 2004). The collection of other supporting data served to

ameliorate potential misunderstanding or misinterpretation of data gathered through the interviews.

Conducting individual interviews:

The semi structured guidelines were used to explore their experiences. They were prepared in English and then translated into Bengali. Communication between the interviewee and interviewer was also in Bengali. All individual interviews were conducted at schools. A 'semi-structured guide' was prepared on the basis of the themes generated in focus group discussions. The purpose of the semi-structured interview was to generate qualitative data in similar areas to those covered by focus groups. Robert Burgess (1984:102) refers to qualitative interviews as 'conversations with a purpose' and Jennifer Mason (1996:38) agrees they are characterized by an informal style, often with the appearance of a conversation rather than a 'formal question and answer format'. The advantage of this method is that it allows participants some flexibility in responding to questions. Semi-structured interviews allow participants to clarify issues raised and to speak at length of their experiences. Interviewing in this way develops a congenial relationship between the researcher and participants.

Researcher conducted interviews with individuals including five principles and five specialist persons including three occupational therapists, one physiotherapist and one psychologist. The all specialist was not available in the schools. The researcher asked questions about each of the topic areas, but these questions do not have to be exactly the same for each interview and the researcher asked new questions when they needed to or wanted to.

"The record of talk that is accumulated through the qualitative interview allows the researcher to describe the complex discursive activities through which respondents produce meaning" (Hiller and Diluzio, 2004). Permission to conduct the interviews was cleared with the schools authority. Interviewees were given the opportunity to participate or to choose not to participate and proper assurances were provided that confidentiality

42

would be maintained in regards to their interviews. Interviews were conducted and transcribed. Respondents were allowed, and encouraged, to provide information outside of the strict scope of the questions. McCracken pointed out the objectives of qualitative questioning as beginning with allowing "respondents to tell their own story in their own terms. In the case of question formulation, it is crucially important that questions be phrased in a general and nondirective manner. Additionally, Dilley (2000) stated "Research protocols must be revisited and revised as we conduct interviews, obtain new information, and crystallize our understanding of the lives and issues we investigate" (p. 134). Research questions were imbedded within the open-ended interview questions. Principal and specialist were contacted, FGD and observation times and places were arranged, and the hand written interviews from each participant were later transcribed.

3.8 Purpose of observation and semi structure interview:

Classroom observations provided evidences of the availability of materials within the classrooms. The teachers all seemed to have learning activities – either teacher produced or commercially produced – to address student needs. These included picture schedules, structured teaching activities, play materials, etc. The teachers described their need for more adequate computers within their classrooms. They also pointed to the need for more space, especially for storing the larger pieces of equipment used for sensory and motor activities.

3.9 Pilot study

A pilot study was conducted by interviewing two principles, two specialists and two focus group discussion of the two schools which schools were not selected for final data collection. This gave the researcher an opportunity to discover which parts of the observation, interview and focus group discussion had difficulty understanding and devise strategies for clearly explaining these. The purpose of the study was explained to the participants. Any questions they had regarding the research were answered. They were informed that no identifying information would be used in any publication resulting

from the research. They were also informed they could withdraw their consent at any time without it affecting current or future facilities from the school.

3.10 Informed consent:

Prior to inclusion in this study, the participants would be given a written consent. Information about the sample and consent form has been given in the appendix .....

3.11 Data analysis and coding:

There are various approaches to data analysis, depending on different perspectives and purposes of researchers and research. Data generated in this study was analyzed by qualitatively. Both focus group sessions and semi-structured interviews were analyzed in three different but complementary ways. These were by group (summaries), by question (grid analysis), and according to selected themes (thematic codes). Researcher believes that in this way a rigorous and systematic analysis was possible. The procedure of each approach used is presented below:

3.11.1 Group summaries:

In this phase of analysis the transcripts of the participants were read carefully and all the main points were noted down in accordance with a set of agreed categories based on the purpose of the study. Categories for individual participants were summarized under key works. In each case the participants' words were used to refer to their experiences of integration in respect to different dimensions.

3.11.2 Grid Analysis:

Participants' views were put into a series of tables that enabled an analysis of the data, question by question, following an approach suggested by Knodel (1993). This was helpful for identifying the totality of responses from all participants.

3.11.3 Thematic coding:

According to Mason:

The central idea of indexing (some writhers and researchers categorizing or coding) is that the researcher applies a uniform set of indexing categories systematically and consistently to their data (1996:111).

Mason (1996) and Miles and Huberman (1994) recommend in order to avoid the generation of a multitude of codes, the researcher should initially apply codes relating the themes and purpose of the study, whilst at the same time keeping an open mind about unexpected themes within the data.

The challenge is to be explicitly mindful of the purposes of the study and of the conceptual lenses you are training on it, while allowing you to be open to and re-educated by things that you don't know or expect to find (Miles and Huberman 1994:56).

For example, a participant was asked to describe his experience of the work environment. The theme of this question was 'physical barriers' relating to the purpose of the study. This was then divided into sub-themes, which were coded under each main theme and, accordingly, analysis was carried out to reflect the participants' views on teaching barriers of the autism schools.

3.12 Problems encountered during data collection:

3.12.1 Lack of trust of participants:

At the beginning of data collection it was observed that the authority of the two schools was disappointed to share their activities and school observation. They were not willing to share the barriers which is hampering in their teaching. They seemed to feel that disclosure of information might create problems within school and it may hamper to get fund from others. Then researcher try to explain the cause of research and their safety helped to persuade the participation to talk frankly with peers.

Reflexibility and Reciprocity:

Reflexibility is seen as means through which rigor in research can be increased (Polgar and Thomas, 1992). Reliability is one of two key criteria through which we can assess the research study. The other key criteria are validity (Silverman, 2000). In an interview setting, both researcher and respondent can exchange thoughts honestly, because any preconception held can be challenged. The researcher did not give any guidance or direction through leading questions. Throughout the project the researcher tried to be honest and treated each participant equally. Any misunderstanding or misinterpretation was clarified at this time. Conducting interviews and developing relationships with interviews was a deeply personal experience and it was necessary to acknowledge and identify this. The participant was empowered in this research project. They were able to express their own feelings without any hesitation and to ensure that good report was built good rapport with them. All participants were able to understand all questions.

Rigor: During data collection researcher was more careful in some aspects to make the research rigor. Researcher spends more time in the field to truly understand the participants, kept a field work diary where they wrote their thoughts and feelings about the data they are collecting. Researcher triangulated of data sources or data collection methods, and the members of sampling were checked of the collected data. All the data was recorded carefully in audiotape and the observations notes was written in separate notebook. Then all the recorded were kept in a safe locked drawer. Researcher has given a thick description for the readers to be agreed with the researcher's opinions and conclusions. At final stage there was coding checking by another researcher that researcher has made.

3.13 Limitation of the study:

By the completion of the study, the researcher had to face some problems, among these, some were overcome and some remained a problem. These problems were limitations of the study:

- The participant numbers were not any larger in this study because in Dhaka there are no other schools that work with autistic children. To conduct this type of study a sample size as larger as possible.
- Limited time and resources, for example accessing relevant literature to the topic
- This was the first attempt at this kind of research for the researcher; therefore, the researcher had limited skills, and experiences in constructing a questionnaire.
- The researcher had to go participant's schools using his own means, which was not cost effective and was time consuming.

This study shows that majority of the participants have satisfactorily knowledge about autism and the management of children with autism spectrum disorder at schools. They have included various challenges when teaching the children with autism spectrum disorder at schools. The teachers who are still working in autism schools were included only as a sample. In this section, the result of this study would be presented. Here SWAC means Social Welfare for Autistic Children, AWF means Autism Welfare Foundation, ACWF means Autistic Children Welfare Foundation.

To conduct this study the participants were chosen from five schools for the children with autism. The SWAC was formed on Feb 3, 2000 by a group of very enthusiastic parents of autistic children. The number of children with autism spectrum disorder was nearly 100. The total number of teachers at SWAC is more than 40 and one occupational therapist. The teachers who were participated at focus group discussion were experienced more than 2 years in this field. They are come from different background like social welfare, economics, physics, math, bangle, zoology, and also child development.

AWF was formed at 2004 by a parent of autistic child who was also the founder member of SWAC. The current number of students at AWF is 135 and the number of teachers is more than 50. Some of them are working for two shifts and full hours. They are also come from different backgrounds. The members of focus group discussion were more experienced most of them were more than 5 years. There was one child specialist, one psychologist, and one part time occupational therapist.

The Autistic Children's Welfare Foundation (ACWF) is a non profit and non political organization Founded in 2007 and run by parents of autistic children. The vision of ACWF is to assist autistic children to have a normal life through appropriate intervention; training and rehabilitation. Its mission areas include Awareness & advocacy, Education, Support, Care, Service and Research. The current numbers of students at ACWF are 25

and the numbers of teachers are nearly 20. The teachers who joined in the focus group discussion were experienced more than two years and from different background. Most of them were not training on this issue but gotten training after coming here as a teacher.

Tauri Foundation is an organization dedicated to establish child right, which was born out of the anguish and determination of parents who believe that their child despite a disability has equal rights to lead a fulfilling and meaningful life. They also believe that all children have equal rights to enjoy social facilities and to contribute in the socio-economic development of the nation. So, they organized few parents, social workers and philanthropists and established Tauri Foundation in 2003. They founded a special needs school " School for Gifted Children" in 2004 , which is an example of labor of love .The school provide to the education and life skill needs of children with different degrees of disability, imagine mainstreaming children with disability and parents are counseled and trained in the art of taking good care of them. The current students' numbers of school for gifted children are 135, between them more than ninety percent are autistic children and the numbers of teachers are nearly 50. The all category students are treated separately in separate place. So this is not jargon and chaotic. The participants who were involved in focus group discussion are experienced more than 3 three years in the field of teaching of autistic child. There are also an occupational therapist and a physiotherapist. Moreover Tauri Foundation is involved in awareness raising campaigns to educate a society, which unfortunately appears to be quite indifferent to the plight and needs of these children.

Hope autism center is another school for the children with autism spectrum disorder. This is formed at April 2008. The current numbers of students are 15 and the numbers of teachers are 15. It is only the school which is run by one teacher for one student. The current services of hope autism center are consultancy, occupational therapy, school facilities, research, awareness programs etc.

In this result part, it will be easy to know the participants understanding, challenges and suggestions from their experience of teaching at schools for the children with autism

spectrum disorder. Here participants are the teachers of schools for the children with autism spectrum disorder who are still working at selected autism schools. The following general categories were founded from the data analysis. These are:

4.1 Category 1: Teachers' perception on autism and the problems of autism.

All of the participants expressed their different perspectives about autism and the problems of autism. There are several themes was found on understanding of autism.

4.1.1 Mental and neurological disorder:
Some participants of FGD-3 told it is mental disorder, some told it is neurological disorder and also some told it is heritage disorder. Most of the participants' told, "Autism is a mental disorder which affect in the area of social communication due to many kinds of abnormal behaviors." Another one participant of FGD-4 told, "The child who always moves his hand, bending head, showing different kind of abnormal behavior is autistic child." It is very difficult to understand from a long distance that the child is autistic, because he does not have any physical problems or change that can express autism.

4.1.2 Brian development disorder:
one physiotherapist had a clear knowledge on autism. He mentioned "Autism is a brain development disorder that makes worse social interaction and communication, and causes some restricted and repetitive behavior, most of the time starting before a child is three years old. It is highly heritable and unclear which genes are responsible. In rare cases, autism is strongly associated with agents that cause birth defects. Autism affects many parts of the brain like cerebellum, cerebral etc; how this occurs is poorly understood. Parents usually notice signs in the first two years of their child's life. Although there is no cure of autism early intervention can help children to gain self-care, social, and communication skills. Few children with autism live independently after reaching adulthood, but some become successful, and an autistic culture has developed, with some seeking a cure and others believing that autism are a condition rather than a disorder." There were many comments similar with therapist.

Specialist-2 told that autism is a condition that not only has communication and behavioral problems but also there are other problems also they have which makes different kind of problems in teaching at schools. Researchers think it is really true that time oriented answer.

4.2 Category 2: Teachers perception on teaching process at schools for autistic children

From the FGD it was known that teaching process at schools for autistic child is same like each other. There are very limited differences were found from the experiences of teachers. Some same activities of autism schools are use of choice board, drawing, singing, play, group play, self care activities like brushing, combing, dressing, etc. All schools are run in the process of two teachers and one ayah for six students. The students sit together in a round table and take different activities like their choices. The student, who are more destructive and have abnormal behavior are separated from the group and is treated in individual corner with one teacher. Another teacher maintains the other students together with assistance of ayah. One participant of FGD-1 told, "We have a routine to work. Such as morning shift, day shift, the morning shift children say good morning after coming at schools and day shift children say good afternoon, they share their information, they get break between work, when they do some activity then students get their choose able toys, they do work like drawing, at the period of Tiffin they go to canteen, sometimes they do not know how to sit at chair-table for breakfast, they learn it, after that they do their own work like clean their table, maintain their drawer, and other another work, they play, pasting the picture on board etc". This statement shows that there are various activities are done at autism schools.

One participant of FGD-4 told, "In each class there are 6 students. At first we observe the capability and ability of the students then we select who would be separated from group. Then we work at group and also in individual session. So work individual and group in a class depend on the students' quality." Another one participant of FGD-3 told, "Our class start at 8.00am and ends at 1.00pm, if the child is senior then 2.00pm due to vocational

class. Every child has their own routine. Time has been divided according to work. To follow the routine the students are worked full time. In between the routine they have singing class, computer class, everything. We notice the boringness of students between the works. We try to keep a break between two works. They choose their toys from the choice board, some one play football, and some one puzzle, who's like what. To overcome the boringness of us and them we use computer to play their choicely game. We follow the process of game, is it following rules or not, if not then we help them".

Teaching process was found little bit change in Hope autism centre due to the system of one teacher teaches one student. One participant of FGD-5 told, "We always work with a child by one teacher. Every activity is followed attentively and the students also give their full attention due to seeking full attention by stimulating them." Another all activities were same like other schools. Researcher also observed the all schools class activities and assimilate them each other. Researcher found that it is same like what was found from FGD. From the semi structured interview it was found that specialist do not involve in teaching directly but when teachers faces any problems then they contact with specialist to get a better solution. Principal also tries to give a full support in regards of teaching.

4.3 Category 3: Teachers' perception about teaching challenges at schools for autistic children.

Every teacher faced different challenges during teaching or working with autistic children. It includes aggressive behavior, repetitive behavior, stereotype behavior, compulsive behavior, etc.

4.3.1 Abnormal behavior: many persons of FGD-2, 4, 5 told, "Abnormal behavior is a challenge of teaching. There are various causes of abnormal behavior like physical problem. But sometimes child shouting loudly without cause then we try to find out the cause of problem but cannot. Obviously they have one cause. If we are unable to find out the cause then we avoid it. When we don't get any cause we fell helpless to do what." Many teachers support this statement. Another one person from FGD-3 told, "It is difficult to tell now, when we work with the students then face many challenges. Many

children have behavior problem. I have one student; I was not able to do any work with him. When I try to do any work with him forcefully, he pulls hair, scrubbing or throw the pen out of table. All of these matters were challenges. Another one matter is our own safety or protection. We have to go forward with his attention." In every sector the teachers have to take challenges. Teachers of FGD-5 told we can not believe the students ever. It is not granted that they will not do any harm of teachers. Any time they can harm. They are doing a job, between this they attack teachers. It seems that they are seeing to one side but naturally they are seeing all side to attack. One teacher of FGD-2 told, "I have one student, you would not be able to understand that seems very gentle, you may think that he is coming for love with laughing but it happened to hurt you".

4.3.2 Sensory processing dysfunction: Kids with autism often have sensory processing difficulties. Hyper responsiveness, hypo responsiveness or sensory modulation problems are frequently seen in autism. So, sensory management is an important part in school settings. Many participants of FGD mentioned these problems. After observing the school environment researcher found, it has pictures all over the wall, it is colorful, it has a lot of movement, and is has sounds. Noise could be from teachers helping students, hallway noise, or even the fluorescent light fixtures. So these kinds of problems hamper in the teaching systems. The students can give their full attentions and in many times they are more irritate and destructive to teachers and environment.

4.3.3 Sexual behavior: Sexual behavior is another big challenge to control. The core theme was come out from the FGD is the change of adolescent period is not well controlled by the children with autism spectrum disorder. In this stage they do not know how have to behave with teachers. So they seek opposite gender to be close with them or they throw the class room's equipment towards the teachers. This kind of challenging behavior they have to face at schools for autistic children.

4.3.4 Literal and visual thinker: FGD-2 and 5 mentioned another one challenges in teaching that Two of the biggest academic challenges for kids with autism are that they

often tend to be very literal concrete thinkers and they are very visual thinkers. Generally information is presented verbally at school and it is presented in an abstract way. Teacher should want kids to think abstractly. However, they are just the opposite of what kids with autism need in order to take in information. They cannot do their class work if they have not understood the information or directions.

4.3.5 Low space of class room and play ground: Low space of class rooms and play ground is another challenge of teaching. One teacher of FGD-5 told, "If someone make any sound then another one also make that sound. It makes a problem. Some students can not tolerate large noise at all. They afraid with little sound also. It makes a painful situation for them."

4.3.6 Parents' attitude: Another one important challenge is parents' attitude on child's problem. It comes out from the FGD that parents do not want to understand that their child is special. Sometimes they compare their child with normal child when it is more distance then they be sad. Every child is different so the ability is not same. It is natural, whether child is special or normal. It should not do compare each other. Sometimes parents expectation is so high rather then child's label of problem. Parents think all problems would be solved at school. They do not consider the condition of autism and its problems. One participant of FGD-4 told, "Parents some times are aggressive due to less or no improvement of child at school." So high expectation is a problem it create a pressure on our mentality about child's improvement. Another one teacher of FGD-3 told, "Some times child got some injury but not at school, parents complain that it is happened at school because the teachers do not take care properly. Without reason complain is a problem, it makes our mind sad and depressed thus hamper on teaching at school."

4.3.7 School rules: The teacher is changed each year for each student. The core theme was sometimes the change of teacher makes some problems like create different thought. Present teacher is not good, previous teacher was good, because then the improvement

was better. But it is not true all time because improvement does not depend only teacher but also depend on different conditions like physical, mental, psychosocial, cognitive etc.

4.3.8 Limited resource: the core theme was found from the FGD that limited resource is another one challenge. In many times, someone doing one activity with one resource then another teacher may require same thing and place. Some times students give pressure to take the same thing then it can not be controlled, we can not explain them that it is one peace, we have one peace and you can take it a little bit later after finished him. But the situation is critical and can not be controlled. So it breaks our peace and rules of schools due to aggressive behavior. Researcher also observed the school environment and also the instruments then assimilated with teachers view. The all statement found correct and similar to resources.

4.3.9 Limited opportunities of training: all participants of FGD were agreed with this statement. Although they were gotten some training but this was by unskillful and low educated persons and limited foreigner trainer. The participant told to teach autistic children there are needed different kind of teaching methods and techniques. So there are no any alternatives of training.

4.4 Category 4: Process of mitigation of teaching challenges
There are various ways and techniques come out from the participants of FGD to mitigate their challenges at schools. The following were the sub themes to mitigate the teaching challenges.

4.4.1 Always engaged the child: most of the teachers of FGD told, whether behavior problems or other problems, at schools they engaged the students in many works; the students have to work many duties so they are not getting enough time to do abnormal behavior. Teachers do not give them any rest, students do one task after one, the teachers guide always so they don't get the time to do destructive or abnormal behavior. But at home they are not cared like school, they are not given proper time at home, so they get

enough time to do abnormal behavior, some times they get free times, at school we keep them in a time frame, for that reason what they don't do at school, they do at home that problematic behavior.

4.4.2 Avoid noisy child: When the student wants to go out side of class room then the child is kept in a place of corner so that cannot go outside of class room. To overcome large noise the teachers moves the noisy student another place. The student who is shouting loudly, the teachers take him down floor for a rest or canteen to eat something.

4.4.3 Ear phones and study wall: Kids with autism often have hearing sensitivities and that noise can be very unsettling to them. So class room should be noise reduced. This could be done with headphones, possibly even connected to white noise to really block out sounds, or cotton in their ears. Think about study walls on their desk made from folders glued together to make a three sided mini wall that blocks out some of the visuals.

4.4.4 Support each other: Every teacher notice another teacher's problems and try to be more cared each other. The every class teachers sit together in every week for one time to solve their problems or challenges which is arising from the students. Every teacher shares their experience and help to solve others problem. In many times the student does not come to school due to sickness, then the teachers of absent students support or help other colleague who is seeking support due to challenges. The students who is disturbing more or who is not sitting on chair then the teacher seek support from senior teachers and necessary suggestions. The student who is more hyper is managed in a separate room.

4.4.5 Negative rewards: One participant of FGD-4 told, "I had one student who always spiting to others, when I do not know the management of spiting then it was very difficult for me to do a work with him, when I try to do any work with him, he spitting me. After thinking more time I decided one plan, when I will work with him, I have to keep a water pot beside me, when he will spitting me then I will also spray that water to his face. After doing several times he has stopped his challenging behavior. After that he make large

sound on wall, he does not understand that he will get hit and that is making harm for his, so when he done it we given our hand of that position after several days that behavior also was stopped totally."

4.4.6 Singing therapy: To prevent aggression of the students, teachers used song by singing and some times used computer song. Then they rhythmic bending their body and listing very attentively.

4.4.7 Support from supervisor and specialist: Another one participant of FGD-3 told, "We have telephone in each room. When we face any kind of problems then we call to our supervisor, she helps us. After 1.00pm, we discuses with our supervisor in every day and every moment." Senior teachers also help each other. They have more cooperation between them. Every Tuesday and Thursday they sit together to solve their problems. When the problems are more severe then the specialists also help us by applying own knowledge and sharing with other specialist also. Some parents also more cooperative and more careful about their child. They share their feelings in dairy, sometimes they sit in a meeting or they share their problems with authority. The parents who do not cooperate more try to arrange counseling and requested to have written their problems in diary. Teachers also help at home of the parents' house by taking the children out side of home and private tuition at home. Most of the service holder parents take this kind of service.

4.5 Category 5: Role of specialist and schools authorities to overcome the challenges
No one can do many things alone; we need support each other to live in society. Effective planning for supporting students with autism and their families is important also. The student's needs for support may go beyond the mandate of the school system. It depends on the situation and demand of time. Different specialist has their own roles to manage autistic children in schools.

But the all specialists are not available in all schools in all time. Such as for more than hundred students there are only one occupational therapist in SWAC, AWF and school for gifted children, in ACWF one occupational therapist for more than 20 students and in hope autism centre one occupational therapist for 13 students. Some of them are part time basis. Only occupational therapist was appointed in all schools but there are scanty in other specialist like speech therapist, physiotherapist, psychologist, child specialist etc. although there are more necessary of all specialist but the teachers faces more difficulties due to inaccessibility of all specialist at school.

4.5.1 Role of psychologist: One psychologist told, "due to any problem of a child, we sit together where teachers, parents and specialist are presented. If any area is changed then we discuss it. If any new students come then I also see the students with teachers, I observe the student at class room, ask question to teachers about child's condition due to sit with parents, although I know but they also say if any more. More over I help the teachers always in all problems." Some times psychologist call parents to know the cause of hyperactivities. Whether it is for casein or rich food or there is another reason behind it. Then they make a routine for school and also for home where is included meal item also. Specialist sits with parents one time for each three months. Specialist also supports in every sector of problems like outing, physical activities, in class etc. the school authority and specialist take the decision and make the plan for activities, and sometimes they take suggestions from other side also like Shishu Hospital.

4.5.2 Role of occupational therapist: One occupational therapist told, "I help the teachers to overcome the challenging behavior at schools and home. I apply sensory integration therapy, I train the students activities of daily living, train the students social communication, provide adaptive equipment to compensate at school environment, counsel the parents about child's problems etc. I also share all things with other specialist and teachers and also with authority. In considering developing countries there are scantier of therapeutics resources at schools. In many times it hamper in my therapy session."

Speech and language pathologists have specialized training in assessing communication needs and designing programs to improve communication. Because communication difficulties are such a significant problem for students who have autism, SLPs can play a critically important role in the collaborative effort to decide on appropriate goals and strategies for meeting the needs of individual students.

4.5.3 Role of authorities: The authority is always alert on their duties. Teachers told if they found any problems in regards of any things the authority try to solve early and give proper suggestions. But for this they have to maintain a chaining system. That mean teachers told the in charge and then the in charge told the concerned authority like director or principle. Authority tries to know the problems of each child and their improvement. Some other duties of principal include implementing education programs for all students in the school; assigning staff; allocating resources within a school; and ensuring that teachers have the information they need to work with students assigned to a class or program. Principals can facilitate the collaboration of school-based teams in supporting students with special needs.

4.5.4 Role of families: The families of students have knowledge and experience that is valuable in developing an effective program at school. This knowledge is of critical importance in answering the fundamental question: What skills are most important for my child to develop in order to enhance his or her life now and in the future? Parents have worked out ways of communicating and managing the student at home that can be helpful in the school setting. When families and schools work together to make the student's program compatible at home and school, the student benefits from the resulting consistency.

4.6 Category 6: Role of parents to mitigate the challenges

Many parents help to mitigate challenges at schools by communicating with diary. They have a communication book by which teachers communicate with parents and share their challenges. Parents also write their feeling at home with children, what things they have

done at home yesterday, with which preparation they have come at school for today such as toilet, breakfast, journey with vehicle etc. parents also attained in parents meeting which is held after every three months of most of the schools. Many participant of FGD-3 told the parents who obey the rules of schools and maintain all suggestions then children are more improved and also they had limited behavioral problems. But the parents who do not obey the rules and do not maintain the suggestions the children then is hyper, they are less improved and many behavioral problems they have.

Although there was a communication book to communication with teachers but all parents do not communicate equally like some other parents. Many of the teachers commented that when mother be more attentive to child at home and follow the rules and activities at home then it is easier for us to management and teaching the children at school. Additionally, the following sub theme will describe it elaborately:

Some Parents were consistent at home and also at school. Autistic children have a hard time adapting what they've learned in one setting (such as the therapist's office or school) to others, including the home. If the child may use sign language at school to communicate, but parents never think to do so at home. Creating consistency in child's environment is the best way to reinforce learning. Parents made the list of activities what the child's therapists are doing and continue their techniques at home. It's also followed the consistency in the way to interact with child and deal with challenging behaviors.

Stick to a schedule is another technique that mother done at home. Autistic kids tend to do best when they have a highly-structured schedule or routine. Again, this goes back to the consistency they both need and crave. Parents followed a schedule for the child at home which was created by teacher, with regular times for meals, therapy, school, and bedtime. Mothers tried to keep disruptions to this routine to a minimum.

Teachers told, the mothers who give Reward for good behavior; it makes the behavior permanent for later use. Positive reinforcement can go a long way with autistic children, so parents made an effort to "catch them doing something good." Praised them when they act appropriately or learn a new skill, parents were much specified about what behavior

they're being praised for. Parents also looked for other ways by asking the teachers and specialist to reward the children for good behavior. Some other techniques was giving them a sticker or letting them play with a favorite toy.

Some mother created a home safety zone for the child at home. That makes the child easyer to do his own activities easily and safety. This space gives the child more relax, feel secure, and be safe. This space involved the child more organizing and setting boundaries in ways the child can understand. Visual cues was given that was helpful like colored tape marking areas that are off limits, labeling items in the house with pictures etc.

Parents made the time for fun at home. The parents know an autistic child is also a kid like other normal child. For both autistic children and their parents need more fun for life satisfaction and success. So, parents gave sufficient time for play and fun together. The important thing is to enjoy the child's company whether it is therapeutic or educational activities.

4.7 Category 7: Participants' recommendation

There are many recommendations were come out from the participants.

4.7.1 Increase publicity: The participant of FGD-3, 4, 5 told we need the help of media. More involvement of media is good. Drama, documentary or what ever they make should be published. There is a little bit published in newspaper. We only see the pen or heading the line but don't see whole news. We should follow the whole see beside the headings. If there is some one program it should be published in all TV channel. There are some organizations are closely involve with us like ATN Bangla, Dutch Bangla Bank, but what about others. Why they are not involving? We need laptop, from where will we get it? Some times TV channel published the interview of madam but it should represent for all.

4.7.2 Change negative mentality: Many participants of FGD-1, 2, 5 told we have to change our negative mentality that there would not be anything by them. We have to find

out their skills and ability. They also can do many things if get proper cared and stimulation.

4.7.3 Engage in vocational activities: it was found from FGD-3 that some children are well in sing, some are in art, and computer and some is visual learner. So if they are properly cared they will learn. We can engage them in vocational activities from 5 years of age. A child can make 100 envelop in a setting. Many children can make 40-50 chain in a setting, some are making block-batik or swing etc. we give more priority for academic study but if child can do his own activities then parents get some pleasure.

4.7.4 Social awareness: Many of the participants of FGD-2, 4, 5 told our society separates the children with autism spectrum disorder. People frequently see them avoided when go to park, fair or other social places. But they are not the outsider from the society; they are also our neighbor or brother. Although parents accept this but it would be more easy if society supports them. Some time parents listen that it is come from great sin. If, he listen that kind of statement, then how he will walk forward with autistic child. For that reason they do not bring their child out side of house. It creates a barrier for the autistic children to learn social behavior.

3.7.5 Increase government responsibilities: There were many suggestions from the teachers of FGD. The government should provide a space to build a big apartment, their will have large play ground, where the children will run freely. Their will have also a garden. Every specialist need separate sector and room for their intervention. Government should aware the general people of the community about autism. One participant told, "If the government takes the initiative for all things then it is better rather than private organization. It is also easy to established any new thing if the government take initiation." Most of the schools are in the city areas but it should be the remote areas also, because every person has the same rights to get same services. The government should arrange different training for the teachers and parents in regards of autism and its management.

62

Another some recommendations were come out from one principal and specialist through interview include- The government should act now to fund training and employ qualified specialist practitioners to prevent the failure of the policy of educational inclusion. Continuing to place children with autism spectrum disorders in mainstream classrooms without adequate support places unfair pressure on teachers. For the child in question, it will lead to integration without social inclusion or educational progress at best, and destructive behavior and exclusion from school in the worst cases. The Department for Education and Skills should sponsor research to establish minimum standards for the education of children with autism spectrum disorders. Systems for monitoring and evaluating the effectiveness of a school's work with these children and of government planning and support should also be implemented. Government should retain special educational needs budgets to allow funding to follow children and be directed at appropriate provision for children with autism spectrum disorders. Governmental departments should collaborate to increase the recruitment and retention rate of specialist professionals such as speech and language therapists, educational psychologists and occupational therapists.

The researcher has some own suggestions like Government should plan to train all teachers, assistants and specialist professionals in awareness and understanding of autism as part of the accessibility planning duty. The Teacher Training Agency should include modules in basic teacher training on how children with autism spectrum disorders learn. All schools should ensure that at least a proportion of their teaching staff have substantial training in autism, preferably at least a full day's training from an accredited training provider. Government should be required to collate and make use of data on the number of children with autism spectrum disorders, facilitating planning for future provision.

In this section the discussion was carried out according to the all of categorizations. The most of the participants had more clear concepts on autism. To support them it can be said that Autism is a syndrome of disability characterized principally by significant problems in the development of communication and social functioning. Autism spectrum disorder (ASD) encompasses a broad definition of autism that includes related disabilities such as Asperger Syndrome, Rett's Syndrome, and Pervasive Developmental Disorder. Autism and ASD are labels describing students with a great range of abilities and disabilities, including individuals with severe intellectual challenges as well as students who are intellectually gifted. With appropriate teaching, all students with autism can learn (Turner, 1998).

Not all autistic children will become independent when they grow up. Teaching children is a difficult task. Now teaching autistic children is a lot difficult than teaching normal children. Teachers need to understand that autism is a learning disability. Of course teaching them is not impossible, but just rather a different kind of challenge. Teachers need to change their perspective in how they learn when teaching them. The goal as teachers of autism schools is to help autistic child find the right balance between learning and routine for them to live an independent and normal life. As an special education program to provide effective instruction for students with autism, some general considerations should be addressed like good health, stimulating and pleasurable setting, visual cue to get started, structured environment, clear guidelines regarding expectations, written or picture schedules, carefully transition to new placement, encourage parents and other family members to participate in programs for autistic child etc. (Anam, D. & Zaman, M. (2003).

Life is unpredictable for autistic child and anything can happen. So, teaching autistic children need to find out what methods of learning best help them. Although teachers had some knowledge of teaching them but they also should know the habits of autistic child

and use that to advantage. As teacher might figure out, they tend to repeat things and have certain daily routines. Use those routines and repetitive behavior as part of learning method. The challenge with teaching autistic children is to incorporate new material in to their repetitive nature to eventual make that new material part of their daily lives.

Please keep in mind that forcing anything to an autistic child will result to unwanted behavior and could be violent in nature. Even though, you will be introducing new material for the good intention of helping child become more independent, please do introduce that material when the child is in a positive and good mood. This will insure that your autistic child will be more receptive to the lesson. Teachers also should realize that it will require a lot of patience teaching autistic children, since will surely need to repeat a lot of things before your autistic child will be able to learn. Also keep in mind that they are mostly visual learners and those pictures and symbols are good for them. It should keep the learning environment clean from visual distractions (Anam, D. & Zaman, M. 2003).

Like other behavioral problems repetitive behave is another one big challenging behavior thus also make the teaching more challenging at schools. Here the children display many forms of repetitive or restricted behavior. Stereotype is a common repetitive movement for autistic child like hand flapping, making sounds, hand rolling or body rocky. Many times child arranged objects in stacks or lines which called Compulsive behavior, autistic child can not tolerate the change of daily routine and different activities and also daily equipments from their own place, they resistance their change, as a example - insisting that the furniture not be moved or refusing to be interrupted, ritualistic behavior involves an unvarying pattern of daily activities, such as an unchanging menu or a dressing ritual, Restricted behavior is limited in focus, interest, or activity, such as preoccupation with a single television program, toy, or game; self injury is another one challenging behavior. It include hand movements that injure or can injure the person, such as eye poking, skin picking, hand biting, and head banging. A 2007 study reported that self-injury at some point affected about 30% of children with ASD. Not all repetitive behavior is same in

each autistic child, in many times it express an elevated pattern of occurrence and severity of these behaviors (Wikipedia, 2010).

There is no substitute of educational training for teaching autistic children. All participants mentioned this. Different kinds of training can make the teachers skillful to teach the autistic children at schools. One of important training includes discrete trial training, which is an effective instructional format for teaching specific skills in an intensive, efficient manner. Skills are taught within a highly structured, one-to-one format providing clear and concise instruction, an additional prompt (as necessary), and an explicit reinforce (reward) for performing the skill successfully. Discrete trial training typically uses a least-to-most prompting hierarchy, moving from a verbal prompt to physical guidance when verbal and nonverbal prompts are inadequate. Trials of instruction are provided on a single behavior in a massed fashion (one after another) with only a brief pause between trials.

Activity-based instruction is another one important technique which describes the instruction of targeted skills within activities and routines that are meaningful for the student. Instructional trials are embedded within student-initiated, routine, or planned activities. Skills are taught within relevant activities and across contexts, increasing the probability that the student will generalize the skill to non instructional activities and environments. For example, an arrival routine for a student may include putting his backpack away, finding his desk, and taking out his daily work folder. If the student were learning how to greet others, request help, and follow a visual schedule, skill instruction could be embedded in the arrival routine and within multiple activities over the day so that an adequate number of instructional trials are provided to the student. Systematic instruction is used within each of those activities to provide instruction on the embedded skill (Olley, J. G. & Reeve, C. E. 1997).

At present there is vast different of teaching techniques for the children with autism spectrum disorder from some years ago. Some students with autism may exhibit

excessive passivity, or patterns of disruptive or even destructive behaviors. Years ago, the common response to these behaviors was punishment, time out, or exclusion to stop or suppress the behavior problems. The currently preferred approach is known as positive behavior support (PBS), a proactive, constructive educational approach for resolving behavior problems. It is based on extensive research as well as principles regarding the rights of all students to be treated with dignity and to have access to educational opportunities. The PBS approach is supported by the discipline regulations of the Individuals with Disabilities Education Act (IDEA) (Barnard, J. et al, 2002).

Different specialist has their own roles in autism schools. So teachers also have to maintain a big role in autism schools like responsible for the education programs of all students in their classes. When a student with autism needs specialized programming and instruction, teachers need to work collaboratively with available specialists to ensure that there is a well planned, co-ordinate approach. Teachers with special training in working with students who have complex special needs support classroom teachers. Specialist teachers have expertise in behavior management and development of social skills. In some cases, the specialist teacher may be a resource teacher with special training in behavior or communication. For some students with autism, the resource teacher may provide direct instruction, while in other cases; specialist teachers provide consultative support for classroom teachers who have a student with autism in the regular class. (Ministry of Education, Canada, 2000)

In some cases, teachers' assistants are assigned to work in classes with students with autism. Teachers are expected to design programs for students with special needs; however, teachers' assistants play a key role in many programs for students with autism, performing a variety of functions from personal care to assisting with the instructional program. Working under the supervision of teachers or principals, teachers' assistants are often involved in shaping appropriate behaviors, developing independent living skills, facilitating interactions with others, or stimulating communication.

Children with autism spectrum disorder have the same basic health care needs as other normal children. They also need same health – promotional and disease – prevention activities, including immunizations. The autistic child may also needs unique health care related to underlying etiology, conditions such as fragile X syndrome or tuberous sclerosis, or to other conditions such as epilepsy, that often are associated with autism spectrum disorder. These health care needs are most appropriately met within the context of a medical home with child specialist. Child specialist would be responsible for seizures, gastrointestinal problems, sleep disturbance, psychopharmacology, and complementary and alternative medicine also.

Where as, traditional occupational therapist often is provided to promote development of self care skills (Dressing, manipulating fasteners, using utensils, personal hygiene) and academic skills (cutting with scissors, writing). Occupational therapist also may assist in promoting development of play skills, modifying classroom materials and routines to improve attention and organization, and providing prevocational training. Sensory integration therapy often is used alone or as part of a broader program of occupational therapy for children with autism spectrum disorder. There are many unusual sensory response are common in children with autism spectrum disorder, this response is also different each other. Sensory activities is helpful as part of an overall program that uses desired sensory experiences to calm the child, reinforce a desired behavior, or help with transitions between activities (Scott et al, 2007).

In all countries, it is easy to implement any thing if the government support or take initiative. Most of the participant told that government has a big role to mitigate the challenges. The government can provide sufficient money or fund to implement this kind of programs. As a poor developing country we should follow other developed country how they are treating the autistic children. Under the U.S. federal law known as the Individuals with Disabilities Education Act (IDEA), children with disabilities—including those with autism spectrum disorders—are eligible for a range of free or low-cost services. Under this provision, children in need and their families may receive medical

evaluations, psychological services, speech therapy, physical therapy, parent counseling and training, assisted technology devices, and other specialized services. Children under the age of 10 do not need an autism diagnosis to receive free services under IDEA. If they are experiencing a developmental delay (including delays in communication or social development), they are automatically eligible for early intervention and special education services. The government should follow this kind of act for our autistic child also.

Chapter – 5 Conclusion and Recommendation

This study aimed to find out the significant challenges at schools for autistic children when teaching them. To do this study information was gathered from the teachers using FGD, where different opinion were expressed and to justify their statements and ideas there were semi structured interview with principal and specialist.

There is no study available which focus on teachers challenges at autism school when teaching them in Bangladesh. Some studies are available on the disabilities barriers and challenges in different working areas. Not specifically in autism. This is the first study carried out in Bangladesh, from the perspective of teachers who work with autistic child in the autism schools.

Participants in this study were drawn from five autism schools and included teachers, specialist and principle also. The study was phenomenological in nature where qualitative research method was used to collect data. Research participants were formally contacted in three different stages to inform the purpose of the research, to collect data and to provide feedback to participants. Moreover, frequent contact was made with individual participants to clarify their information when it seemed unclear.

The main themes raised by participants as crucial for their challenges into the autism schools are listed below:

1. Challenging behavior
2. another some challenges – low space, low resources, limited training on this issue, limited play ground etc
3. Different specialist is necessary to mitigate the challenges
4. parents support at home and school is essential
5. The government has a big roles to mitigate the challenges of schools

Most of the times, the challenges were same. But some times it has been found that the challenges vary according to individual circumstances across difference dimensions of school environment, school policy, and community life also. Participants who had not received adequate training before joining in the school believed that the first challenge is

to manage abnormal behavior. First they believed that they would not be able to learn anything due to their problems but it has been changed totally. Now they know that they can also learn many things like normal child. They also believed that society creates disability through its ignorance, showing negative attitudes towards children with autism spectrum disorder, excluding these children from mainstream services such as health care, education and creating barriers through inaccessible built environment and transport systems.

Autistic children are categorized as a 'vulnerable group' by the Ministry of Social Welfare, along with orphans and others who are disadvantaged. The government has welfare program but even here the children with autism receive lower priority. Most of the services that are available for disabled for autistic child are mostly provided by voluntary organizations, as in other low resource countries (DAA, 1995). Recently the National Forum of Organizations Working with the Disabled (NFOWD)' has been highly influential on the Bangladesh government. As a result the government of Bangladesh has agreed to implement various declarations and conventions adopted by the United Nations.

Although various non government organizations are supplementing government's services for disabled people in Bangladesh but it is very rare for autistic children. These NGOs are mostly foreign funded and largely dependent upon charity. Government services which are available are limited to vocational training and special education and these services are concentrated largely in urban areas.

The study was undertaken against the background of present service provision by autistic schools in Bangladesh. There is no any government school which is running for autistic children in Bangladesh. This resulted in almost complete dependency on a non-governmental institute or organization. The selected five schools provide comprehensive management and services for the children with autism spectrum disorder. The services of five schools have been critically reviewed and compared each other. It shall be first summaries the findings in respect of the objectives of the study outlined in chapter one. I shall then outline a number of recommendations relating to the services at autism schools to mitigate the challenges.

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Date: October 12, 09

To

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Subject: Approval for the access of program field for the research of Masters' in Early Childhood Development.

Dear Sir/Madam,

This is to inform you that Md. Zahir Uddin Akanda is a student of MSc. in the Early Childhood Development, IED-BRAC University need your support to conduct a research for his/her Masters program.

I would therefore request you to allow this student to use the field under your authority for the purpose of the research of Masters Thesis. I am ensuring you that, information, documents, data, manuals, materials, as well as the research findings shall remain confidential by the students and will not be used or disclosed without your consent.

With Regards

....

Mahmuda Akhter

Head of Early Childhood Development Resource Centre

IED-BRAC University

Date: October 27, 2009

To,

The Principal / Head of the Authority,

Subject: Application for the permission of data collection in your school or institute

Dear Sir/Madam,

With due respect, I would like to state that I am Md. Zahir Uddin Akanda, Occupational Therapist, currently doing a research in the Institute of Educational Development (IED), BRAC University, in supervision by Dr. Atiqur Rahman, Professor, SWRI, University of Dhaka and Dr. Pia Rebello Britto, Associate Research Scientist, Yale University, to fulfill the requirement of my masters course in Early Childhood Development. The title of my study is "teaching Challenges of children with ASD at autism school – teachers' perception". To fulfill of my study I have to collect some data from different autism schools that is running for more than two years. In the data collection process, there will have school observation, interview with different persons including principle or head teacher, specialist (Occupational therapist, speech and language therapist, child psychologist, etc) and a group of teachers who are working for more than two years. I will use focus group discussion with the teachers for approximately 60 minutes. In the group there will have 6 to 8 teachers with experience more than two years in the filed of autism. The time frame of the data collection would be 9th to 20th November, 2009. I think this research will bring a major change in the field of autism to fulfill their all requirements of teaching at autism schools. Your support is obligation to fulfill my study.

In this circumstance, I hope you would be kind enough to give me these opportunities by arranging the above requirements and selecting a date for data collection to fulfill my masters' course and to improve the teaching system in the autism schools not only in Bangladesh but also all over the country.

Yours faithfully

Occupational Therapist, Md. Zahir Uddin Akanda

M Sc (ECD, Thesis), BRAC University, Dhaka, Bangladesh

Contact: 01814091733 or Email: zuakanda@gmail.com

Consent form

I   am

....

.... has been agree and enthusiastic to
be a participant in a research title ''find out the challenges of teachers when teaching the children
with autism spectrum disorder at autism schools'' with the condition that the researcher will
never deceive me in any way.   He always obtains my full information consent. He never
embarrasses or compromises with me and preserves my dignity and well being. Participant will
have the right to withdraw consent and discontinue participation at any time. Information from
this study will be anonymously coded to ensure confidentiality and will not be personally
identified in any publication containing the results of this study.

I agree to participate in the study described above.

Signature of participant:

Signature of researcher:

TITLE: Teaching challenges of children with ASD at autism schools – teachers' perception

SPECIFIC AIMS: To find out the challenges of teachers' facing during teaching the children with ASD at autism schools.

PURPOSE OF THE STUDY: To know personal information of all teachers about their problems in teaching of autistic child at autism school

- To reveal teachers ways and means of managing the children with ASD at schools
- To find out the importance of highly structured education system for the children with ASD at autism school.
- To collect suggestions from the principles, specialist and teachers in improving the teaching system at autism schools.

METHOD: The present study will be a qualitative phenomenological study. The techniques of data collection would be document review, observation, and interviews. The researcher will use purposive sampling for sample selection who has working experience more than two years in the field of autism.

TIME: possible time – principle 20 – 30 minutes, specialist 20 – 30 minutes, focus group discussion of teachers 50 – 60 minutes, school observation 20 – 30 minutes.

SUPERVISOR CONTACT: National Mentor, A S M Atiqur Rahman, Ph.D, Professor, Institute of Social Welfare and Research, University of Dhaka and Co – International Mentor, Pia Rebello Britto, Ph.D. Associate Research Scientist, Child Study Center, NIHB 207, Yale University

BENEFITS: Without receiving appropriate and upgrade training on the particular educational requirements and lack of particular things for this group, it would be unreasonable to expect from teachers to provide appropriate teaching of children with ASD. The proposed research will find out the teachers' difficulties when managing the children with ASD in the special needs schools. If this study can find out some challenges of teachers face during teaching and that is hampering in their teaching then it would be shown to the authority for taking possible steps for solving or substitute the challenges. The autistic children and their families would be benefited. The structured educational system, constructive and organized environment will help to improve the attention of autistic children and teacher will feel very easy to manage their work at schools.

Appendix – 5 (Questionnaire)

The questionnaire

1. Some general conversation – name, back ground, working experience etc
2. What do you know about autism and autistic child?
3. How do you feel to work with autistic children? Why good, why not good?
4. What challenges do you face in teaching them at school?
5. How do you manage or mitigate this kind of challenges?
6. How much parents support to mitigate challenges?
7. How the authority and specialist does support you?
8. Do you think the present school premises and resources are sufficient for your activities?
9. How much you can be patients in teaching them and how much you allow them in activity (children)?
10. Do you support the children in and out side the class?
11. How much you support parents, school authority, other teachers and children?
12. What is your suggestion to improve this situation and how the authority, parents and colleague can help you to deal your challenges and barriers?
13. Another what things do you feel better if you have for your activities?
14. Some ending comments and thanks
15. As a specialist how do you support the teachers to mitigate their challenges? (for specialist)
16. As the authority how do you support to mitigate the challenges at schools and homes? (for principal)