

A Journey towards Inclusion
An Assessment study of Neuro-Developmental
Disability (NDD) centres operated by BRAC

December 2021

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(Popular Version)

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**Study conducted by
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Acronyms

ABL	Activity based Learning
ACIE	Asian Centre for Inclusive Education
ASD	Autism spectrum disorder
ATEO	Assistant Thana Education Officer
AUEO	Assistant Upazila Education Officer
BBS	Bangladesh Bureau of Statistics
BD	Bangladesh
BDHS	Bangladesh Demographic and Health Survey
BEN	Bangladesh ECD Network
BEP	BRAC Education Programme
BIDS	Bangladesh Institute of Development Studies
BKK	Bangkok
BNFE	Bureau of Non Formal Education
BRAC	Bangladesh Rural Advancement Committee
BSA	Bangladesh Shishu Academy
CAMPE	Campaign for Popular Education
CBO	Community Based Organization
CECCD	Comprehensive Early Childhood Care and Development
CHT	Chittagong Hill Tracts
CIPRB	Centre for Injury Prevention and Research
CMC	Centre Management Committee
COVID	Corona Virus Disease
CP	Cerebral Palsy
CRPD	Convention on the Rights of Persons with Disabilities
CSN	Children with Special Needs
CSO	Corporate Social Responsibility
DDEF	Disable Development & Educational Foundation
DFAT	Department of Foreign Affairs and Trade
DMCC	Disaster Management and Climate Change
DOI	Digital Object Identifier
DoWA	Department of Women Affairs
DPE	Directorate of Primary Education
DPs	Development Partners
DS	Down Syndrome
EC	Early Childhood, Executive Committee
ECCD	Early Childhood Care and Development
ECCE	Early Childhood Care and Education
ECD	Early Childhood Development
ECDP	Early Childhood Development Programme
ECDRC	Early Childhood Development and Resource Centre
ECL	Each Child Learns
EDUCO	Education and Development Foundation
EFA	Education for All
ELC	Early Learning Centre
ELCD	Early Learning for Child Development
ELDS	Early Learning Development Standard
FGD	Focus Group Discussion
GER	Gross Enrolment Ratio
GMR	Global Monitoring Report
GO	Government Organization

GoB	Government of Bangladesh
HNPP	Health Nutrition and Population Programme
ICDDR,B	International Centre for Diarrhoeal Disease Research, Bangladesh
ID	Intellectual Disable
IEP	Individualized Education Program
IER	Institute of Education and Research
IMR	Infant Mortality rate
IT	Information Technology
KAP	Knowledge, Attitude and Practices
KII	Key- Informant Semi structured interview
MA	Massachusetts
MAM	Multi Agency Meeting
MICS	Multiple Indicator Cluster Survey
MIS	Management Information Systems
MoCHTA	Ministry of Chittagong Hill Tracts Affairs
MoE	Ministry of Education
MoHFW	Ministry of Health & Family Welfare
MoP	Ministry of Planning
MoPME	Ministry of Primary and Mass Education
MoRA	Ministry of Religious Affairs
MoRA	Ministry of Religious Affairs
MoSW	Ministry of Social Welfare
MoU	Memorandum of Understanding
MoWCA	Ministry of Women and Children Affairs
NAPE	National Academy for Primary Education
NCTB	National Curriculum and Textbook Board
NDD	Neuro-developmental disabilities
NER	Net Enrolment Ratio
NFE	Non-Formal Education
NGO	Non-Government Organization
NIPORT	National Institute of Population Research and Training
PEDP	Primary Education Development Program
PLP	Present Learning Performance
POS	Parent Opinion Survey
PPE	Pre-Primary Education
RIB	Research Initiatives Bangladesh
SBK	Shishu Bikash Kendra
SDGs	Sustainable Development Goals
SDP	Skills Development Programme
SEN	Special Educational Needs
SL	Serial
SMC	School Management Committee
SRHR	Sexual and Reproductive Health and Rights
SSRN	Social Science Research Network
SWP	School wide Plan
TLM	Teaching Learning Materials
TV	Television
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WB	World Bank
WHO	World Health Organization

Acknowledgement

BRAC operated Neuro-Developmental Disability (NDD) is a unique project in Bangladesh. It covered all types of children with Neuro-Developmental Disability including Autism Spectrum Disorder (ASD) for individual development; promote social, educational and health rights. Vocational skill development is another initiative of this project for self-dependency. BRAC operates community-based NDD centres to achieve these objectives.

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We are hopeful that the findings and recommendations will be taken up and acted upon. The findings and recommendations will also support further programme development, policy dialogue and will inspire all stakeholders to address the needs of children with NDD in Bangladesh.

The Study Team

Study at a glance

In order to spread the inclusion initiative, BRAC Education Programme (BEP) developed Children with Special Needs (CSN) unit in 2003. BEP experienced that a large number of children with disability remained excluded from its Children with Special Needs (CSN) unit. In year of 2014, BEP launched Neuro Developmental Disability (NDD) centres for mentioned children who were from poor communities in Bangladesh in cooperation with Health, Nutrition & Population Programme (HNPP) of BRAC.

The specific objectives of the study were to assess the initiatives of NDD centres on individual development and social rights, to analyse institutional capabilities and implication and to analyse perception of the stakeholders. To reach the research objectives, this study incorporated a mixed method design, which is widely accepted as a reliable method of data collection in social studies. Both quantitative and qualitative data were collected to understand the baseline situation in project area. This study was conducted in the BRAC's three pre-selected geographical locations where some prior project activities were present. This was a two phase study in first phase census questionnaire and key informant semi structured interview have been used to collect data from participants. After the analysis of the first phase data, in-depth interviews and Focus Group Discussions (FGD) were designed with very selective number of participants in second phase for further exploring some issues to be raised from the first phase data. For the census, a total 105 parents were selected purposively and 21 participants (6 teachers, 3 caregivers, 6 students, 3 community members and 3 non disable children only from Sylhet) were selected purposively to do the key informant semi structured interview. In one project location (Sylhet), the centre, activities, classroom and other services were observed. For second phase 1 FGD was done with 2 BRAC staff and key informant semi structured interview were done with 2 Government staff and 2 BRAC policy level staff (Programme Head, Divisional Head). Findings from multiple sources have been triangulated to allow the findings reliable from various perspective and to assess the reliability of the responses.

Findings:

- The main target for educational inclusion of the centres is to prepare the students for primary level of education.
- The centres were providing vocational training through trained teachers to the students according to their level and interest.
- It was found from parents' view that most of the children were well prepared for educational inclusion than social inclusion and vocational inclusion.

- The stakeholders from all the locations reported that in the area of physical, emotional, intellectual, social, skills and development, linguistic and communication showed positive improvement among the children with NDD.
- The children with NDD became valued in their family as well as in the community and their relationship with family members was improved.
- The improvement which was shown in the children through the therapy and medication service from the centre was like a miracle according to the teachers, parents and community members.
- The centres included the children in Aarong vocational programme and the children were earning money.
- In order to ensure social inclusion, in one location the centre started an inclusive class programme and which was a great achievement as both NDD students and non-disable students were benefited.
- Along with the government stipend, few supports had been provided to the students from the BRAC fund.
- Usually there were two shifts in each location and 20-22 students were studying under the supervision of two teachers and one caregiver in each shift.
- The teachers were well trained and they were using play based materials, sensory materials to teach the students.
- According to the BRAC staff the main focus of the project was to help the children with NDD lead a quality life. So teachers focused on making them self-reliant rather than academically strong.
- The teachers prepared the Individualized Education Program (IEP) according to the government pre-primary curriculum and under the supervision of therapist the teachers and caregivers provided therapeutic service to child.
- If the children required any assistive device like hearing aid or wheel chair it would be provided from BRAC fund.
- Among the services most parents were satisfied about the therapy service of the centre and least satisfied about the vocational services.
- As the centres were closed during the COVID situation so teachers could not provide the physical services and in an alternative way teachers were giving services through mobile.

- The teachers were giving only educational and easy therapy services to the children through the mobile with the help of parents and few days back they started their vocational services as earlier the situation was not so favourable that they could provide the materials to the parents.
- Though the services were going on however both teachers and parents were not happy as dealing with these kinds of children was not an easy task. Especially according to the parents, because of the COVID situation the condition of their children had deteriorated than before.
- The stakeholders who were related to the centres and services, they all showed positive attitude towards the support and services of the NDD centres.
- As it was observed from the community members data that before going to the NDD centre the life of both parents and children with disability were quite different.
- The support and services from the NDD centres changed not only the life of the children with NDD but also their parents' life in a positive way.
- The students of NDD centres were also happy about the environment of the centres and with teachers. Because here they could play, dance, sing and most importantly they learn new things.
- The stakeholders were surprised about the improvement of the children in few cases. The parents were quite positive about the behaviours of the staff.
- Most of the parents were satisfied about the overall development of their children and they started dreaming about their children that they would be self-reliant and could do their work independently.

According to the data findings recommendations were given in three sectors: parents, centre and services.

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Chapter 1

Introduction

Bangladesh is one of the poorest and most densely populated countries of the world in South Asia and is home to approximately 163,654,860 people (Bangladesh Demographics Profile 2013, July 2013 est.). It is a country of widespread poverty and there is around 25% population are living under below the poverty line who have a daily per capita income is \$2 (BD E-directory). The public services are insufficient especially health, education and social safety net, low employment and natural disasters.

It is estimated that 10- 15% persons with disabilities (World Report on Disability 2011, WHO & World Bank) of the total population live in developing countries so it is assumed that over 16 million people are living with a disability in Bangladesh. 7.1% children (0-9 years) are living with Neuro-Developmental Disorder (NDD) in Bangladesh (Survey of Autism and Neuro Developmental Disorder (NDD)-August, 2013-MoHWSW). A combination of poverty, lack of facilities and lack of awareness of mass people, the Neuro-Developmental Disabled persons are excluded from social, educational rights & protection and health care services. Therapeutic Professionals in the local health line is not available. On the other hand, their carers don't have the specialist therapeutic skills they need to care and early identification for their family members with disabilities to drive large-scale of change. Ultimately, Children with neuro developmental Disabilities in Bangladesh are not receiving the dedicated health care they need.

Neuro-developmental disabilities (NDD) are one of the most vulnerable groups as they receive little or no assistance from public service agencies. So, goals and objectives of NDD project were set to improve the quality of life of Neuro developmental Disability (NDD) and to promote their social, educational and health rights and individual development through skill development.

BRAC included children with disabilities in its educational initiatives in order to ensure basic education for these underprivileged children. However, BRAC Education Programme (BEP) officially established the Children with Special Needs (CSN) unit in 2003 with the objective to realize the potential of children with disability and to provide them a better life (Mallick, 2016). BRAC operated Neuro-Developmental Disability (NDD) is a unique project in Bangladesh. It covered all types of Persons with Neuro-Developmental Disability including Autism Spectrum Disorder (ASD) for individual development; promote social, educational and health rights. Vocational skill development is another initiative of this project for self-dependency. BRAC operates community-based NDD centres to achieve these objectives.

Broad objective:

To assess the initiatives of the Neuro-Developmental Disability centre for promoting the social, educational and health rights and protection of children with neuro-developmental disabilities.

Specific Objectives:

- To assess the initiatives of NDD centres on individual development and social rights of neuro-developmental disabled children under this project.
- To analyse institutional capabilities and implication that may or may not meet the educational and health rights of children with NDD.
- To analyse perception (attitudes, views and demands on support and services of NDD centres) of parents, communities and the relevant stakeholders (GOs, NGOs)

Definitions of operational term:

Disability: According to the United Nations Conventions on Rights of Persons with Disability (UNCRPD) the definition about disability is not clear. Disability is an evolving concept, and that disability results from the interactions between persons with impairments and attitudinal and environmental barriers that hinders full and effective participation in society on an equal basis with others. Persons with disabilities include those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others' (UNCRPD, 2006, p. 4).

Neuro developmental disability: Neuro developmental disorders are disabilities in the functioning of the brain that affect a child's behaviour, memory or ability to learn e.g. mental retardation, dyslexia, attention deficit hyperactivity disorder (ADHD), learning deficits and autism (WHO).

According to the Neuro developmental disability act 2013 there are four types:

- (a) Autism or autism spectrum disorder;
- (b) Down syndrome;
- (c) Intellectual disorder;
- (d) Cerebral palsy.

Autism or autism spectrum disorder.- Persons who have all the features mentioned in clauses (a), (b) and (c), along with one or more of the features mentioned in clauses (d), (e), (f), (g), (h), (i), (j) and (k) of the following may be considered as disabled with autism or autism spectrum disorder, namely-

- (a) Restricted verbal or non-verbal communication;

- (b) Restricted social and interactive behaviour, limitations in exchange of views, and difficulties in imagination;
- (c) Stereotype or repetitive restricted behaviour;
- (d) Comparatively lower or higher sensitivity to hearing, vision, smell, taste, touch, feel, balance and movement;
- (e) Intellectual or other disability or seizure;
- (f) Uncoordinated development and outstanding skill on one or more specific component;
- (g) No or poor eye contact with others;
- (h) Hyperactivity, impulsivity, or irrelevant laughing and crying;
- (i) Abnormal physical gesture;
- (j) High tendency to maintain same routine;
- (k) Such other features as the government may, by gazette notification from time to time, prescribe.

Down syndrome. - Persons who have genetic problem, due to the presence of an extra chromosome at 21st chromosome pair, causing lower to severe intellectual disability or poor muscles strengths, and physical shortness with mongoloid face may be considered as disable with down syndrome.

Intellectual disability. - Persons who have any one or more of the following features may be regarded as disable with intellectual disability, namely-

- (a) Significant limitations to act according to age;
- (b) Limitations on intellectual work, such as: to analyse cause and effect, to learn and solve problems;
- (c) Limited skill to daily activities, such as: communication, self-care, social activities, self-control, health care and safety, self-education, etc; or
- (d) Lower intelligent quotients.

Cerebral palsy.- (1) After any trauma or infection to the immature brain, if any person's - (a) normal posture and movement affects his or her daily activities; (b) brain damage remains unchanged; and (c) skill to daily activities is not improvisable by appropriate health care; then, he or she may be regarded as disable with cerebral palsy.

(2) The features of cerebral palsy may be as follows:

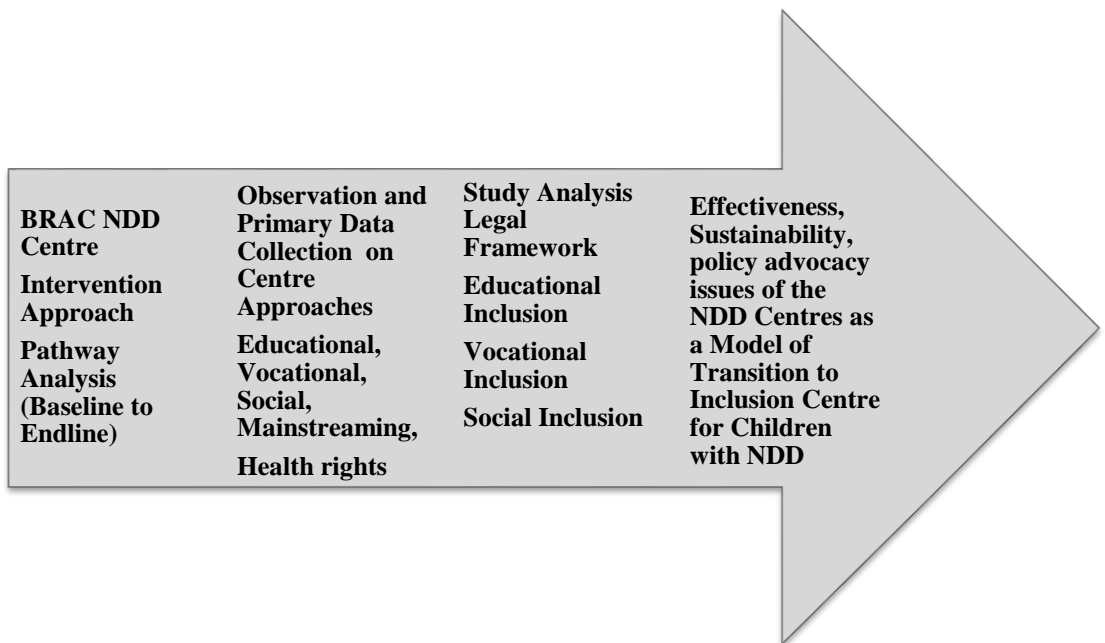
- (a) Muscle tone either too stiff or too floppy;

- (b) Uncoordinated or restricted movement of hands and legs;
- (c) Poor or lack of balance in physical movement;
- (d) Low or high degree of impairment in vision, hearing and intellect;
- (e) Restricted behaviour;
- (f) Restricted communication; or
- (g) Affected hands of single or both side, and legs of single or both side.

Study Framework:

The study framework is based on three notions:

- **Legal Framework:** NDD legal framework, Person with disability act and law
- **Inclusion Dimension:** Education Inclusion, Vocational Inclusion and the most importantly Social Inclusion
- **Health Dimension:** Health policy



Disability and NDD context in Bangladesh

According to WHO and WB, in Bangladesh 15 million people are disabled and most of them are closely linked to poverty. The percentage of Bangladeshis with a disability ranges from 10% to 16% and is higher among lower income brackets (World Bank, 2016). Young people with disabilities are highly marginalised in terms of access to education, training jobs and income, with higher

unemployment rates, and lower average incomes than their non-disabled peers; and it is worse for young women with disabilities (BBS, 2015). According to Bangladesh Disability Detection Survey (2015) 68.70% people with disabilities were unemployed and among them 53.13% people with disabilities were not fit for the job. Among different types of disability 16.35 % neuro developmental disable people are working in different field. Bangladesh ratified the UN Convention on the Rights of Persons with Disabilities (CRPD) in November 2007. However, its implementation has lagged behind policy commitments. Since 2007, Bangladesh reviewed many of its laws and policies, including the Children Policy (2011); Children Act (2013); and the Rights and Protection of Persons with Disabilities Act (2013). In addition, the Constitution of the People's Republic of Bangladesh guarantees basic human rights of every citizen, prohibiting any form of discrimination based disability among other grounds. The Rights and Protection of Persons with Disabilities Act (2013) replaced the Disability Welfare Act (2001). The national disability policy promotes employment of the persons with disabilities. The Government of Bangladesh reserves 10 percent quota for orphans and persons with disabilities for public sector jobs, however compliance is thought to be low. The National Skill Development Policy (2011) includes improving access to training for people with disabilities. The Education Policy (2010) includes children with disabilities, as does the Comprehensive Early Childhood Care and Development Policy (2013). Many of the initiatives focus on early learning centres/preschools with fewer initiatives focusing on secondary education for students with disabilities. While disability inclusion is on the agenda for both the Ministry of Education and the Ministry of Primary and Mass Education, children with disabilities fall under the purview of the Ministry of Social Welfare, resulting in the education of students with disabilities being siloed away from those in charge of education.

Chapter 2

Methodology

To reach the research objectives, this study incorporated an exploratory mixed method design, which is widely accepted as a reliable method of data collection in social studies (Cohen, Manion, & Morrison, 2007; Creswell, 2008; Johnson & Christensen, 2008). From the philosophical view of realism, to explore the initiatives of the Neuro-Developmental Disability centre for promoting the social, educational and health rights and protection of children with neuro-developmental disabilities, this study go for a holistic approach of data collection by reaching to all the stakeholders related to the project. The study was conducted to assess the project performance not to generalize so purposive sampling was done to get in depth findings from the intervened sample. This

study was conducted in the BRAC’s three pre-selected geographical locations (Dhaka-Korail, Khulna-Tutpara, Fulbaria and Sylhet-Gashitula) where some prior project activities were present.

This was a two phase study in first phase census questionnaire and key informant semi structured interview have been used to collect data from participants. After the analysis of the first phase data, in-depth interviews and Focus Group Discussions (FGD) were designed with very selective number of participants in second phase for further exploring some issues to be raised from the first phase data.

Table 1: Methods Summary

Phase	Type of data collection method	Type of sample	Size of sample	Location	Mode of data collection
First phase	Survey	Parents	27	Dhaka	Over telephone
			25	Sylhet	Over telephone
			53	Khulna	Over telephone
	Key- Informant Semi structured interview	Children of NDD centre	2	Dhaka	Over telephone
			2	Dhaka	Over telephone
			1	Dhaka	Over telephone
			1	Dhaka	Over telephone
			2	Sylhet	Physically
			3	Sylhet	Physically
			2	Sylhet	Physically
1	Sylhet	Physically			

		Community member	1	Sylhet	Physically
		Children of NDD centre	2	Khulna	Over telephone
		Teacher of NDD centre	2	Khulna	Over telephone
		Care giver of NDD centre	1	Khulna	Over telephone
		Community member	1	Khulna	Over telephone
Second phase	FGD	Central level (BRAC staff)	2		Online
	Key- Informant Semi structured interview	Policy level (BRAC staff)	2		Over telephone
		Central level (Government staff)	2		Over telephone

Demographic information of quantitative data:

For parents' census in total 105 parents were interviewed from three locations (Dhaka, Sylhet and Khulna). From Dhaka 27 parents were interviewed among them 14 were female and 13 were male. From Sylhet 25 parents were interviewed among them 13 were male and 12 were female. As there are 2 centres in Khulna so 53 parents were interviewed among them 28 were female and 25 were male. In selection procedure of the parents all types of Neuro developmental disability were covered (ASD, ID, CP, DS and Multi).

Demographic information of qualitative data first phase:

For key informant semi structured interview total 21 participants were interviewed in first phase. There were 5 types of participants – children of NDD, non-disable children of NDD centre, Teachers, Care givers and community members. From each location 2 children were selected in total 6 children from 3 locations (Dhaka, Khulna and Sylhet) were interviewed among them 3 were girls and 3 were boys. Also all types of Neuro developmental disability (ASD, ID, CP, DS and Multi) were covered in the selection procedure. As only in Sylhet location the inclusive programme was run so 3 non disable students of NDD

centre from Sylhet was selected among them 2 were boys and 1 girl. All the teachers and care givers of NDD centres were female so from each location 2 teacher and 1 care giver in total 6 teachers and 3 care givers were selected from three locations. The educational qualifications of the teachers were H.S.C to B A. and they all got the training on disability and inclusion from BRAC. The educational qualifications of the care givers were class 7 to H.S.C and they also got the basic training on disability and inclusion from BRAC. From three locations 3 community members were selected 2 male and 1 female. All the community members were engaged with centre related activities and their educational qualifications were under S.S.C to graduation.

Demographic information of qualitative data second phase:

For second phase 1 FGD was conducted with 2 BRAC central level staffs who were directly related with the operation of project. Along with this key informant semi structured interview were done with 2 BRAC policy level staffs (Programme head & Divisional head) and 2 Central level Government staffs who were related with education and NDD.

Ethical Consideration:

Social research possess several ethical issues that include informed consent, confidentiality, originality of the work, demonstrate respect, risk and harm minimization, voluntary participation, keep away from deception and so on (Cohen et al., 2007; Johnson & Christensen, 2008). The identity of the participants or their organizations was not mentioned. They were noted by their organizational position (following a number) in order to avoid exposing their identity. All the participants were given consent note individually and the purpose of the research was explained accordingly.

In addition to that, the research team had strictly followed the Health and hygiene instructions of the Government, WHO and BRAC related to COVID 19 situation in every step of the study including data collection and meeting contexts.

Limitations of the study:

1. The study was conducted purposively to assess the intervened sample of the project.
2. There was no opportunity to incorporate IRB approval information as this was a programmatic research
3. The study was a project intervention assessment study not an impact measurement study
4. There was no baseline study information.

Chapter 3

Document Review Findings

Secondary document review process was applied in the study that had assisted the researchers to understand the current status of the educational inclusion of children with NDD in Bangladesh.

Table 2: International Document review Findings:

Type	Source	Description
EMPLOYMENT	CRPD	Article 27 of the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) is directly related to work and employment and at its core recognizes the right of Persons with Disabilities (PWD) to “work, on an equal basis with others”. This includes the ability to “gain a living by freely chosen or accepted in a labour market and work environment that is open, inclusive and accessible”. Additionally, Articles 24 and 26 also speak to the need for vocational training programs to ensure access to employment.
	SDGs	Sustainable Development Goal (SDG) 8 aimed at “promoting sustained, inclusive and sustainable economic growth and full and productive employment and decent work for all” explicitly mentions persons with disabilities in target 8.5 which states that “By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value”. Targets 8.7 and 8.8, though not specific to people with disabilities, are intended to tackle problems faced by the most vulnerable populations and include “taking immediate and effective measures to eradicate forced labour” and protection of labour specifically for those in “precarious” employment settings. SDG 4(Target 4.5), focused on education

		specifically mentioning access to vocational programming for person's with disability.
	WHO	<p>The WHO cites implementation of antidiscrimination laws as the starting point for reducing barriers to employment for individuals with disabilities. Challenges like lack of reasonable accommodations, workplace accessibility and recruitment and selection bias can be improved through the use of formalized policies and procedures. Additionally WHO suggests that increased opportunities for inclusion would also facilitate reduction of negative perceptions and stigma, and display people with disabilities ability to be productive, contributing members of society.</p> <p>The ILO Convention 159 regarding employment and people with disabilities, the Employment Equality Framework Directive 2000/78/EC, addressing employment discrimination including but not limited to disability or North American examples such as the Americans with disabilities Act or the Canadian Human Rights Act must of necessity be placed within a specific national context</p>
HEALTH	CRPD	Article 25 recognizes that persons with disabilities have the right to the enjoyment of the highest attainable standard of health without discrimination on the basis of disability. States Parties shall take all appropriate measures to ensure access for persons with disabilities to health services that are gender-sensitive, including health-related rehabilitation.
	SDGs	SDG 3: Ensure healthy lives and promote well-being for all at all ages. Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all Substantially increase health financing and the recruitment, development,

		<p>training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States.</p>
	WHO	<p>WHO acknowledges that individuals with disabilities have the same general health care needs as others, however; their health outcomes are often less favourable; PWDs are two times more likely to find healthcare providers skills and facilities inadequate; they are three times more likely to be denied healthcare; and they are four times for likely to be treated “badly” in the health care system. One Billion citizens globally experience disability which is approximately one in seven people; of those, half cannot afford health care and are fifty percent more likely to suffer a catastrophic healthcare expenditure which can result in being pushed into poverty. Approximately 200 million people do not have access to glasses or devices that would improve vision; seventy million people need a wheel chair but only 5-15% have access to one and 360 million people worldwide have moderate to profound hearing loss but hearing aid production only meets 10% of global need including a mere 3% of developing countries’ needs.</p>
	CRC	<p>Article 24 States Parties recognize the right of the child to the enjoyment of the highest attainable standard of health and to facilities for the treatment of illness and rehabilitation of health. States Parties shall strive to ensure that no child is deprived of his or her right of access to such health care services.</p>
<p>Inclusive Education</p>	CRPD	<p>Article 24- Persons with disabilities are not excluded from the general education system on the basis of disability, and that children with disabilities are not excluded from free and compulsory primary education, or from secondary education, on the basis of disability; Persons with disabilities can access an</p>

		inclusive, quality and free primary education and secondary education on an equal basis with others in the communities in which they live; Reasonable accommodation of the individual's requirements is provided; Persons with disabilities receive the support required, within the general education system, to facilitate their effective education.
	SDGs	SDG 4: "Ensure inclusive and quality education for all and promote lifelong learning". SDG 4-Target 4.5 explicitly includes students with disabilities stating, "By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations". SDG 4: Target 4a also mentions students with disabilities in regards to accessibility: "Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all".
	WHO	In comparison to other children, those with disabilities are less likely to start school and have lower rates of remaining in school. It is estimated that one third of all primary aged children who are not in school are children with a disability. Those in school are all too often excluded within the school setting, are not placed with peers in their own age group and receive poor-quality learning opportunities; children with disabilities require access to additional learning opportunities and/or special services such as rehabilitation.
	CRC	Article 28 – Right to Education: All children have the right to a primary education, which should be free. Article 29 – Children's education should develop each child's personality, talents and abilities to the fullest.

National Document Review:

The Persons with Disability Rights and Protection Act, 2013

- Ensures rights & dignity of the persons with disabilities by stipulating 21 rights
- Rights to educational, physical and psychological improvement
- Rights to participation in social and state activities
- Rights to get the national identity cards and be listed in the voters roll
- Mandates enrolment in regular schools, reservation of seats on all forms of public transportation, accessibility provisions in all public places (including retrofitting), equal opportunities in employment, and protection of inherited property rights

Neuro Developmental Disability Protection Trust Act, 2013-

- highlights the issues related to providing physical, psychological, and economic assistance to all persons with disabilities
- ensures their nurture, security and rehabilitation
- ensures their social empowerment
- focuses to develop pertinent education system and knowledge paradigm

Initial Steps on NDD in Bangladesh

- From 2009 onwards the Honourable Prime Minister of Bangladesh Sheikh Hasina has taken a keen interest to take this issue forward both nationally and globally
- Centre for Neurodevelopment and Autism in Children (CNAC) was established at Bangabandhu Sheikh Mujib Medical University (BSMMU) under the direct patronization of Prime Minister Sheikh Hasina
- Development of National Strategic Plan on autism and neuro-developmental disorders
- Orientation workshop and Training on Autism was held at NAEM (National Academy for Educational Management), DPE (Directorate of Primary Education) and Shishu Academy to develop Master Trainers for respective Ministries as follow-up activity of the GAPH BD(Global Autism Public Health Initiative) Bangladesh
- Teachers' Training on Autism was held on 6 September 2012
- Government of Bangladesh formed the South Asian Autism Network (SAAN) and prepared its Charter

- In 1999, Jatiyo Protibondhi Unnayan Foundation (JPUF) was founded to ensure that the persons with disabilities have adequate support to participate in the mainstream society
- Around 61 special needs schools are run by the NFDDP through different NGO's. 7 of these schools are based on an inclusion model
- 10 Shishu Bikash Kendra (Child Development Centres) in medical college hospitals has been established
- 73 Disability Service Centre is functioning in district & upazila level having a special Autism Corner. Another 60 is under process.
- The JPUF has been running a special school for the autistic children since 2011. 30 children with disabilities from 30 poor families are studying in this special school without any tuition fee. Research & Skill Development Research
- Two national level survey projects have been conducted: } first was a door to door survey for all form of disabilities conducted by MoSW } second, a pilot screening project for developmental disorders in children through the community health clinics
- The Autism Resource Centre is in process to be established to provide free therapeutic services, referral services and counselling
- Government allocated a total of 12.01 acres of land in Savar in favour of Jatiyo Protibondhi Unnayan Foundation (JPUF) to establish a Protibondhi Sport Complex as a center of excellence
- Expansion and development of PROYASH in Dhaka Cantonment Project to provide care to 400 children with autism and disability
- The construction of National Disability Complex has been inaugurated on 2nd April, 2014. It has been designed to provide care 360 special students including autistic children. There will also be a special education centre for 250 learners including autistic children and babies
- National Autism Academy under Ministry of Education to conduct substantial research to develop culturally sensitive, cost-effective and intervention based curriculum and contents

BRAC disability inclusion program with NDD project:

Holistic Approaches towards Inclusion by BRAC

BRAC recognises the existing and potential contributions made by persons with disabilities to the overall well-being and diversity of their communities. For over 40 years, BRAC has been empowering communities to harness their own human and material resources to rise out of poverty. The holistic approach

geared towards inclusion gives poor and marginalised groups the chance to seize their own lives and make a lasting change. Inclusiveness is one of BRAC's four core values, the others being, integrity, innovation and effectiveness. BRAC strives to internalise these principles, which is reflected in the outlook of our staff, as well as various components of our development programmes. BRAC aims to make a visible commitment by embodying a culture of inclusiveness in all its endeavours.

Promoting human rights, fundamental freedoms and full participation of persons with disabilities can result in their enhanced sense of belonging and make significant strides in human, social and economic development while eradicating poverty. Thus with its core value of inclusiveness in mind, ensuring equality, accessibility and awareness for persons with disabilities is a top priority for BRAC's employment practices and overall development strategy.

Rationale to introduce NDD Project

BRAC included children with disabilities in its educational initiatives in order to ensure basic education for these underprivileged children. However, BRAC Education Programme (BEP) officially established the Children with Special Needs (CSN) unit in 2003 with the objective to realize the potential of children with disability and to provide them a better life (Mallick, 2016). According to the report of BRAC Research and Evaluation Division (2016), since then about 200,000 children with disabilities have graduated from BRAC schools and more than 50,000 are currently enrolled. Along with creating inclusive teaching learning and physical environment in BRAC schools, BEP provides corrective surgeries and assistive devices like wheelchairs, crutches, hearing aids and glasses. The first cohort of children with visual impairment attended the Primary Education Completion Examination (PECE) in 2015. To comply with the call from the Prime Minister Sheikh Hasina and Saima Wazed Hossain, a leader of the autism movement at national, regional and global level, another important initiative has recently been implemented by BRAC with regard to health and education of children with neuro developmental disabilities. From 2014, the CSN unit launched the Neuro Developmental Disability (NDD) centres in Bangladesh in cooperation with the Health, Nutrition & Population Programme (HNPP) of BRAC. These centres are meant to be truly 'community based centres' for poor, underserved communities in the country. Till June 2015, four centres were established; one each in Dhaka, Pabna, Khulna and Gazipur districts. Preparation for opening another centre in Sylhet district is in progress. Four types of children– (a) autism spectrum disorder (ASD), (b) intellectual disability (ID), (c) Down syndrome (DS), and (d) cerebral palsy (CP) or multiple disabilities combining any two types of autism, intellectual disability, Down syndrome, cerebral palsy are eligible to enrol in these centres. Additionally they allow children with hearing impairment (HI) as well though they do not directly fall under the neuro developmental disability category. As children with HI

cannot talk, society considers them as children with ID and BRAC picks some of them for schooling. They would otherwise not have the schooling opportunity. When HI children come to NDD centres they cannot be pushed out unless they are admitted to mainstream or special school for them. Each centre accommodates 15-20 children from 03-18 years with the mentioned categories of disability. Female teachers and care givers are recruited from the same community. BEP is financing these centres from its core funds. From September 2014, the Apasen International (AI) has been providing some financial and technical support for two NDD centres (Mallick, 2016).

Inclusion in BRAC strategy 2016-2020

From the interview with BRAC staff it was found that according to the BRAC strategy 2016-2020, persons with disabilities would be constitute five per cent of total target population of BEP (BRAC Education Programme) and Health Nutrition and Population Programme (HNPP), and seven per cent of the total target population of Disaster Management and Climate Change (DMCC) programme. Moreover, 10 per cent of the target group for Skills Development Programme (SDP) would be from persons with disabilities and from ethnic minority groups. Also they added that, BRAC's persons with disabilities unit is working since 2003 with its multi-dimensional interventions. The unit has been working towards ensuring the rights of persons with disabilities to education through its inclusive approach. The policy level staffs revealed that, BRAC Education Programme (BEP) has placed children with disabilities at the forefront of their many educational interventions, bringing thousands of them under early childhood development centres, primary schools and adolescents clubs. They also added that, BRAC extends its support even after the persons with disabilities graduate from BRAC schools. It keeps them under its umbrella through its scholarship and continuous follow-up so that they can smoothly complete their education. Those who find it difficult to bear their educational expenses with the income of their families are engaged in income-generating activities, such as small grocery stores or livestock rearing. In terms of inclusion with NDD project with the other programmes of BRAC one policy makers suggested that if needed BRAC will try to include the NDD students in other programmes according to their level and necessity though the opportunities were very limited in terms of need. From the interview with BRAC staffs they repeatedly focus on the issue of collaboration with government as the financial aspect has become a big problem. Regarding this from the government officer's interview it was found that If BRAC is going to share their programme and success story about their NDD project with concerned department/s of government and if they find it as good initiative, they can also collaborate with BRAC.

Chapter 4

Primary Data Findings and Analysis

Through the section the findings from both quantitative and qualitative data were analysed according to objective wise. The broader objective of this research was to assess the initiatives of the Neuro-Developmental Disability centre for promoting the social, educational and health rights and protection of children with neuro-developmental disabilities. Under the broader objective there were three specific objectives. The first objective was to assess the initiatives of NDD centres on individual development and social rights, second objective was to analyse institutional capabilities and implication and third objective was to analyse perception of the stakeholders. Here only major findings were highlighted and detail findings were discussed in the final report.

Table 3: Objective wise theme list

Objective	Theme
To assess the initiatives of NDD centres on individual development and social rights	Initiative for individual development - Educational initiative - Vocational initiative - Health initiative Initiative for social right Parental perception about child's overall development
To analyse institutional capabilities and implication	Resource and capacity of the centre Infrastructural facilities of the centre Available services -Educational and Vocational Curriculum Teaching material Assessment -Therapeutic services Parental view towards the institutional capabilities

	<ul style="list-style-type: none"> -View about institutional capacity -View about other services from the centre -View about teaching-learning support of the centres -View towards centres' safety -View towards centres <p>Mechanism during COVID situation</p> <p>Transition to inclusion</p> <p>Challenges</p> <ul style="list-style-type: none"> - Challenge in Education service - Challenge in Vocational service - Challenge in Health service - Challenge in Social inclusion - Challenge in COVID situation - Parental view about challenges
<p>To analyse perception of the stakeholders</p>	<p>Parental and other stake holders' attitude towards centre and services</p> <ul style="list-style-type: none"> -Parental and other stakeholders' attitude towards centre -Parental attitude towards staff -Other stake holders' attitude towards staff -Parental overall attitude -Parental expectation about child -Parental perception about child's future plan <p>Policy level attitude towards centre and services</p> <ul style="list-style-type: none"> -Government attitude -Achievements -Embedding NDD into Aarong initiative -Future plan of the project

Findings and analysis of objective 1

4.1 Initiative of NDD centres

Under the theme the initiatives of the centres were discussed. The centres had taken initiatives to improve the condition of the children in three dimensions: education, vocational, social area. To support all these areas health initiatives were also in built with those. Along with this parental perception about child's development after getting the support were also discussed.

4.1.1 Initiative for individual development

The centres were providing services in three dimensions: Educational, Vocational and Health. The theme was revealed the effects of these services on the children and how it changed their life.

4.1.1.1 Educational initiative

Before coming to these centres the parents of children with NDD would have treated their children like a burden. However, when the teachers of NDD centres started counselling them and made them understand the value of their children's life. After coming to the NDD centre parents observed some changes and progress in their child and they felt very happy and hopeful. The children from NDD centres also started dreaming about their future life like other normal children. It was revealed from the interview that some of the students wanted to be teachers in the future, some wanted to be police, some wanted to be wrestlers and even one wanted to be an engineer.

"I want to be a robotic engineer as I like to work with electronic instruments"

-Student from NDD centre

"A 22 years old boy who is now talking so nicely however when he came to the centre first he did not even get up his head."

- Caregiver from Khulna NDD centre

The centres were mainly preparing them for primary school. The teachers were using different kind of methods and techniques to teach the students. The teachers were

usually using sensory materials and play based learning techniques. Mostly the services were provided according to the children's type and level of disability.

"From our centre four (n=4) multiple disability students have so far admitted in normal school and they are doing well."

-Teacher from Dhaka NDD Centre

The teachers were well trained and tried their best to improve the children's condition. They got foundation training and also in service training from BRAC. They also got vocational

training. It was revealed from FGD with BRAC staff that the teachers and caregivers were provided safe guarding training by donor agency and foreign trainer took session in the training programme. According to the teachers and caregivers most of the students' condition had improved after getting the services. There were few students who were prepared to go to normal school and in one area 4 students had already gone to normal school. When teachers, caregivers and centre stakeholders felt that a student do relatively well academically, they prepared that student for general school.

4.1.1.2 Vocational initiative

In every centre with the help of Aarong the vocational training was provided to those children who were above 13 years old. Although none of the students could get permanent job in any vocational institute however Aarong gave them opportunity to work for part time or temporarily basis. Student could make jewellery and other items demanded by Aarong. Aarong authority was so pleased with students' vocational activities. Students delivered the products on time. Students of NDD centre took part in different local and regional fair hosted by local administration. Some

“Our target was so that children with NDD could make product according to their ability and products be like payel, bracelet, hair band, false ear ring etc. Aarong never compromise in product quality. The products prepared by NDD children have a special packaging with a message along with Aarong tag.”

-Senior Manager, Aarong

students were very good at tailoring. One case was found that a female student from Khulna did tailoring independently in her area and raw materials were supplied from BRAC's own fund to start her business properly. From FGD with BRAC staff the information was given that all the students did not get the vocational training only those who had stable fine motor and gross motor ability along with this most importantly who were interested in vocational work only would have got the opportunity. The teachers and other staff also received vocational training so they could teach the students. From the centres the vocational materials were provided. During COVID situation the vocational training was going on with some easy craft.

4.1.1.3 Health initiative

The interview participants revealed that in health sector the centre was providing therapy and medication services. After getting admitted in the centre the physiotherapist would check the particular child and according to his/her need would prescribe some therapy. With the help of teacher, the therapist would continue the service. The centre would also provide medical services where the students would be taken or referred. The services were going on

according to the children’s need. However the teachers, parents reported that in one project location the medical service were remained closed for few years.

It was found from the interview that after getting the services almost 50-70% children of these centres could do their daily living activities by themselves. The teachers also added that in some cases they need some assistance of their parents. Because of the therapy service many students showed improvement especially the CP students.

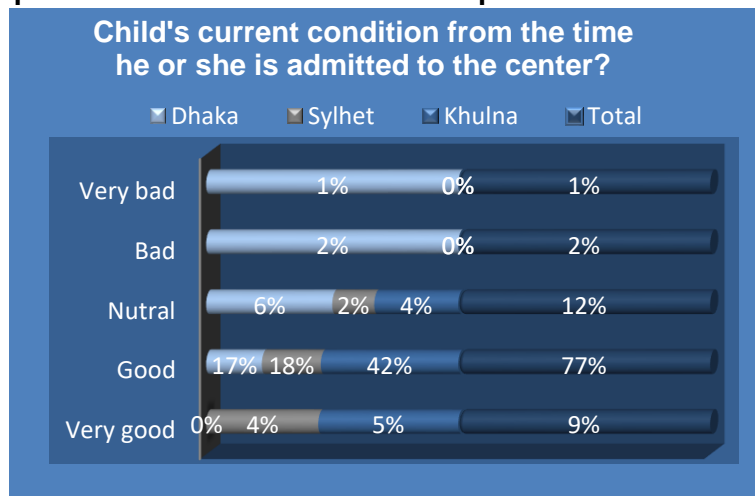
4.1.2 Initiative for social right

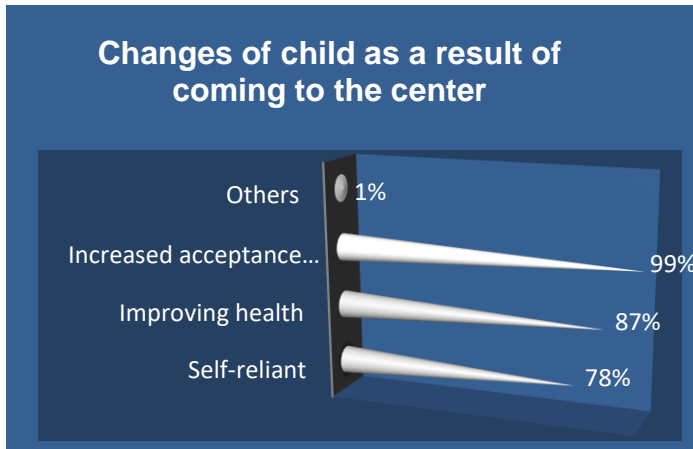
The centres were giving various services to make the children with NDD socially acceptable. The teachers reported that they usually had arranged sports competitions annually and sometimes they took their children to participate in inter district competition. The students also felt very excited to participate in the games. One student from Khulna stated that, **“I like to take part in different sports and I stood first in most of the sports last year.”**

Even through these types of competition the community people got the chance to know about the development of the students with NDD. The teachers also reported that they had started an inclusive class in one project location and which was a great success. The children with NDD had shown improvement in many aspects after getting involved with the children with non-disability. The children with non-disability also responded quiet positive. The centres had taken initiatives to provide the government disability stipend for the students. From BRAC staff it was known that they had tried their best to arrange the stipend to the students as this procedure was so lengthy.

4.1.3 Parental perception about child’s overall development

Under the sub theme parents’ perception about their child’s overall development and the areas of child’s development were discussed. After the admission into the NDD centre most of the parents were happy and they noticed the development to their children in so many areas, which was found from the quantitative data. There were positive





changes in the children in terms of Self-reliant, Improving health and increased acceptance (family, siblings, area) etc.

As there was no baseline information of the project so the comparison between previous situation and current situation could not be shown here.

From the current data analysis it was found that Parents commented positively on the child's current condition from the time he/she was admitted to the NDD centre. The graph showed that 9% children's current condition was very good and 77% children's were good. On the other hand, 2% children's current condition was bad and 1% children's was very bad. It was also found from parent opinion that 12% children's condition was neutral. According to location wise most of parents from Khulna responded that their children's condition were good and least of the parents from Dhaka responded that their children's condition were good. However 1% parents from Dhaka stated that the condition of the child was very bad even after admitting to the centre.

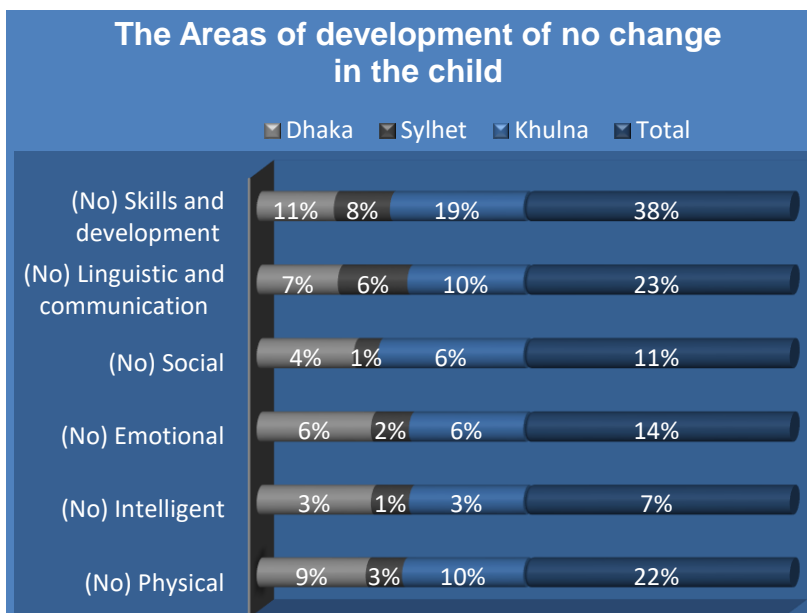
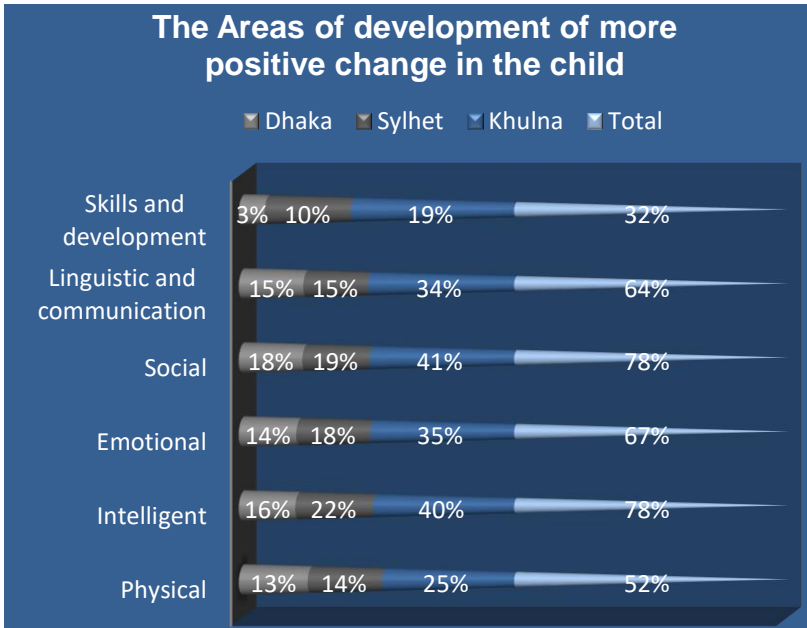
As there was no baseline data was found so the analysis was done on current situation data findings. After admitting in the centre, there were positive changes in the children in terms of Self-reliant, Improving health and increased acceptance (family, siblings, area) etc. The above graph showed that the acceptance of NDD child among their family, siblings and community (99%) has increased mostly commented by the parents. Also self-reliance (78%) and improved health condition (87%) were also noticed among the children.

Parental perception about child's development

According to the most of the parents, their children developed in physical, emotional, intellectual, social, skills and development, linguistic and communication area. Among the areas mostly social, intellectual and emotional areas were developed and skills and development area was least developed. No baseline data was found so the previous situation of the child could not be compared with current.

The positive changes in the child were identified in the following areas: physical, emotional, intellectual, social, skills and development, linguistic and communication. The quantitative data described that among them 94% of parents felt that their child had a positive change in intellectual side, 90% in

social side, 87% in emotional side, 79% in physical side, 78% in linguistic and communication side and 61% of parents felt that their child had a positive change in linguistic and communication side. According to location wise among three locations students from Khulna showed greatest improvement in physical (41%), intelligence (94%), emotional (87%), social (90%), linguistic and communication (78%) and skills and development (61%).



Three areas were found where children had more positive changes. It was seemed in the graph the three areas were mostly social (78%), intellectual (78%) and emotional (67%) as per their parents opinion. In the area of physical (52%), linguistic and communication (64%) and skills and development (32%) had less positive changes among the children. According to location wise among three locations students from Khulna showed most positive improvement in physical (52%), intelligence (78%), emotional (67%), social (78%), linguistic and communication (64%) and skills and development (32%).

There were some areas where children did not improve at all. The graph showed that in the area of skills and development (38%) had not changed which was felt by the most of the parents. In other areas like physical (22%), intelligence (7%), emotional (14%), social (11%) and linguistic and communication (23%) had not changed reported by the parents. According to location wise most of the parents of Khulna reported that their children had no development in physical (22%), intelligence (7%), emotional (14%), social (11%), linguistic and communication (23%) and skills and development (38%).

Findings and analysis of objective 2

4.2 Capability of the centres

Under the theme the overall centres capability like capacity of each centre, infrastructural facilities, available services, parental view about the centre, COVID-19 situation mechanism and challenges of the services were discussed.

4.2.1 Resource and Capacity of the centres

Under the project NDD centres had been operating at three different locations (Korail slum in Dhaka, Ghashitula in Sylhet and Fulbari railgate and Tutpara in Khulna) with 142 students. In Khulna location there were two centres one in Fulbarigate and the other in Tutpara. All centres were being operated in the building house with four to five rooms and play space. Two rooms were using for academic activities, one room was for therapy, one room was for sensory stimulation, additional space was using for vocational training and another space was for play therapy. In each centre there were 2 teachers and 1 caregiver for 20 students and in each shift there were 20-22 students. The centres were run in two shifts morning and afternoon. One teacher was responsible for academic activities and vocational skill development for 8-10 students those who were adolescents; another teacher was responsible for 8-10 younger students for academic improvement and behaviour modification.

Table 4: Number of teachers, caregivers, and students according to location wise

Area	Number of teacher	Number of caregiver	Number of student
Dhaka	4	2	40
Sylhet	4	2	35
Khulna	4	2	67

The teachers stated the information in the qualitative data. From FGD with BRAC staff it was found that the girl children and most vulnerable children got priority in the admission facility first and also who could come to the centre without the support of others. It was found from the class room observation that the sitting arrangements of the students were a half circle table and chair in the academic class. As the centre activity was closed because of COVID-19 situation so how the teachers had conducted the class physically it could not be observed. Now teachers were taking classes from their home through mobile.

4.2.2 Infrastructural facilities of the centres

The centre observation data revealed more detail information about environmental facilities like there was first aid box for the safety purpose, the toilet was clean and had enough materials, there was filter for safe drinking water, and the classes were conducted in half circle chair and table.

4.2.3 Available services

Under the sub theme the available services of educational and vocational and therapeutic services were discussed.

4.2.3.1 Educational and Vocational

Here curriculum of the centres, teaching materials of the centres and assessment system were discussed.

Curriculum

NDD centres had been operating for basically building an inclusive society and aimed to help children keep pace with the existing social system. It revealed from the qualitative data that the centres were preparing the students for primary school and they were following pre-primary curriculum. From the teachers and BRAC staffs it was understood that for every child they had prepared a PLP and following the PLP they were working with 8 domains to improve the child's condition. In the following section a comparison had been shown among pre-primary curriculum and centre PLP. The centres covered almost all the area of the pre-primary curriculum through PLP. However the

analysed data suggested that they would need to modify the terms and content they had used in the PLP (Like instead of condition other term can be used, academic part should be more elaborative etc.)

Table 5: Comparison between Govt. Pre-primary curriculum and Centre PLP

Government pre-primary curriculum area	Centre PLP (Present Learning Performance)
Physical and mobility	Physical condition
Socialization and emotional	Socialization
Linguistic and communication	Behaviour
Early mathematics	Academic condition
Creativity and aesthetic	Daily living activity
Environment	Intellectual condition
Science and technology	Academic condition
Health and safety	Communication

Teaching material

The teaching materials used in the centres seemed to be useful to the children. It was seemed during the centre and classroom observation the following materials were used in Sylhet NDD centre. Teachers were using the materials to teach the students. The other two centres' staff also said the similar materials were used in their centres in the interview.

Table 6: Type of teaching materials

Area	Use of materials
Academic	Government books, note books, pen, pencil, eraser, sharpener, drawing book, colour pencil, black board, chalk, chart of vowels, chart of consonant, chart of fruit, flower, bird and fish, mobile, TV, sound box
Play lab	Football, handball, tennis ball, zim ball, different types of toys, skipping rope, different types of swing, slipper, different shapes of ball, ball house, hair matrix
Vocational	Different block dice, crap paper, nose pulse, bangles, ring, ear ring, rock yarn, ribbon, cloth yard, wool yarn, silk yarn, colour for block and dye, sari

Photo Gallery-1: Physical facilities in the NDD Centre



P-1: First aid box



P-2: Inside view of toilet



P-3 & 4: Water purifier & Sitting arrangement of classroom (half circle table)

Photo Gallery-2: Type of teaching materials



P-1 & 2: colourful world & dream world- A part of play lab: Academic



P-3 & 4: Harmonium & Hanging wall board: Academic



P-5 & 6: Beads and handmade products & Chemical, first aid box and handmade products: Vocational

Photo Gallery-3: Types of Therapy Materials



P-1 & 2: Hand punch & Pinat: Physio therapy



P-3 & 4: Abductor liver & Dolphin massager: Physio therapy



P-5 & 6 Pic Velco board & Standing frame: Physio therapy



P-7 & 8: Colour matching roll & Cognitive development board: Used for Occupational therapy



P- 9 & 10: Sensory room & Different types of block: Used for Occupational Therapy



P- 11 & P-12: Providing speech therapy & Number puzzle for Speech therapy

Assessment

The centre observation and qualitative data findings showed that before admitting into the centre the child was assessed by a doctor and according to his direction the therapist and other teachers prepared service plan for the child.

“At the beginning we have provided so many in service trainings to the staffs however for want of budget they are getting less training and there is also lacking of skilled doctors, trainers and therapists.”
 - Central level staff of BRAC

The teachers also reported that if there was absent of doctor then they took the case history and tried to observe the child to find out how they could work with that child. Usually there was a doctor and therapist however in Dhaka centre there was no doctor for last two years so the teachers had to do the work. The BRAC staff in FGD mentioned these issues. In the assessment form Physical condition, Socialization, Behaviour, Daily living activity, Intellectual condition, Academic condition and Communication areas were observed. One teacher from Dhaka echoed that,

4.2.3.2 Therapeutic services

The therapy materials used in the centre seemed to be appropriate and useful to the children. The following materials were found for therapy services during the centre observation. The students were getting therapy according to their needs. The teachers and the care givers provided the therapy services under the supervision of a therapist. From the data it was seen that the parents and other stakeholders were satisfied with therapy services. Because of the therapy service many students had shown improvement especially the CP students.

Table 7: Type of therapy and materials

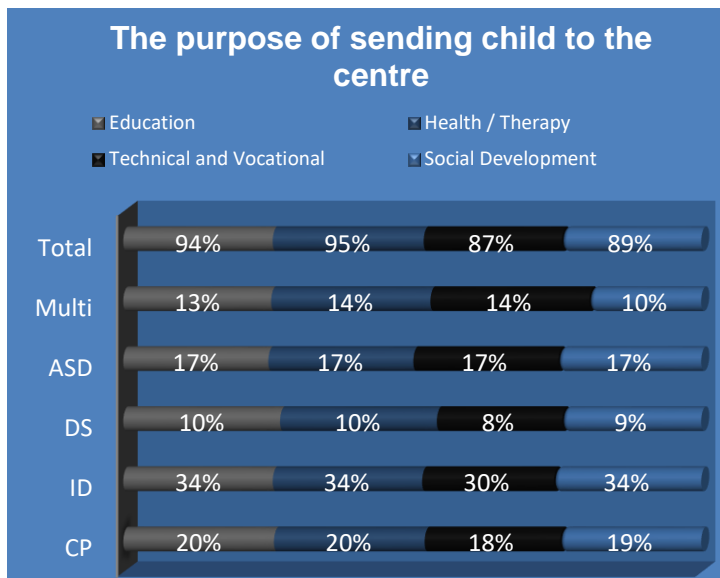
Type of Therapy	Use of materials.
Physio	Parallel bar, Balance board, Walker, Wheel chair, Crutch, Elbo crutch, Standing frame, peasant bed, roll velco board, pic velco board, capsule ball, Physio ball, sensory ball, sensory messenger, walking frame, scooting box, roller, stairs, electrical trade mill, bouncer, trump poli, aesthetic bicyzcle, balance track, revolving light,
Occupational	Toilet chart, how to do brush teeth chart, food chart, finger puzzle, sensory mat, wall climber, sensory pillow
Speech	Motor brush, communication board, bubble set, long tunnel, animal puzzle, Bangla alphabet puzzle, English alphabet puzzle, counting puzzle

4.2.4 Parental view towards the institutional capabilities

Under the sub theme parents' view about institutional capacity, view about other services from the centre, view about teaching-learning support of the centres, view about centres' safety and view towards centres were discussed.

View about institutional capacity

Here, parents' view about the centres capacity revealed. The following two graphs described the purposes for which parents sent their children to the centre and how well they were being served. Data showed that most of the parents sent their children to the centre for access to health or therapy services and getting access to education service, health or therapy services and social development services for their children were fulfilled mostly.



¹Parents' opinion on the purpose of sending their child to the centre was reviewed in the above graph. Most of the parents had sent their children to the centre for access to health or therapy services (95%).

Some parents sent their child to centre for both education service (94%) and technical/ vocational services (87%) and social development services (89%).

According to NDD type wise, the number of Intellectual disabled (ID) children was most and the number of Down syndrome (DS) children was least among the other types of disabilities who were sent to the centre for getting the services.

¹ ASD= Autism spectrum disorder; DS= Down syndrome; ID= Intellectual disabled; CP= Cerebral palsy; Multi= Combining two or more types of disabilities

With a little more or less, children get all kinds of services at centre Available.

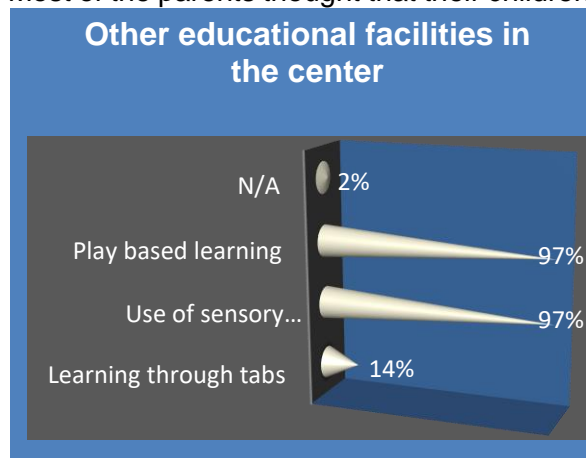
The expectation of parents about getting access to education service (96%), health or therapy services (93%) and social development services (90%) for their children were fulfilled mostly.



However getting technical and vocational services (40%) for the children were not fulfilled according to the parents' expectation. According to NDD type wise all type of children were getting equal services in education, health or therapy and social development however in getting the technical and vocational service the number of Cerebral palsy (CP) (4%) and Down syndrome (DS) (3%) were least among the other types of disabilities.

View about Teaching-learning support of the centres

Most of the parents thought that their children were learning through play based and sensory materials besides the face to face learning.



In addition to the traditional face to face learning activities at the centre, learning activities were conducted through a few other means. 97% of the students were simultaneously learning through sensory materials and play-based learning methods.

The graph also showed that 14% of students were learning simultaneously through tabs.

View towards centres' safety

The sub theme illustrated parents' view towards centre's safety. From the quantitative data it was found that most of the parents were satisfied about the safety issue.

Safety issue was more important to the parents. Parents were quite positive on child's safety issue in the centres. The above graph showed that 17% of parents opined about the child's safety in the centres were very good and 76% of parent's said well. Only 2 % of parent's commented bad and 1% of parent's commented very bad. It was also found that 4% of parents' comments were neutral.



There is a guard at the main gate and if the students want to buy any food the caregivers help them and we do not let any students go without their parents.”

Teacher from Khulna NDD Centre

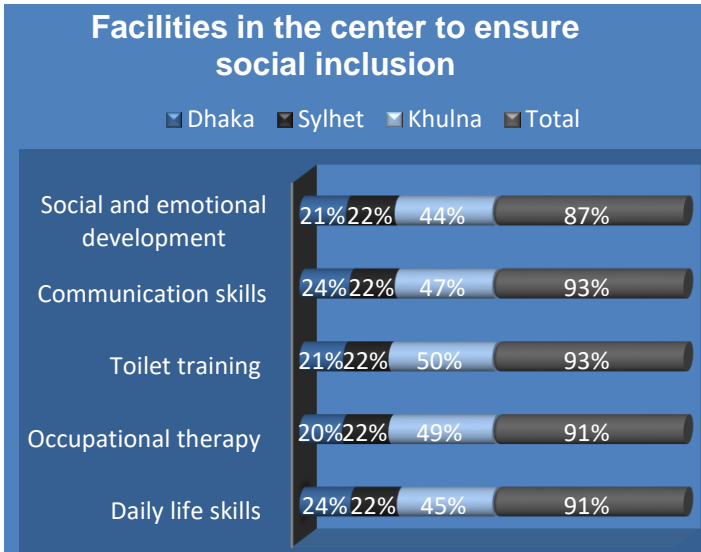
The same findings were identified from the qualitative data. The stakeholders were so happy with security of the centres. One community member from Dhaka echoed that, “After arriving all the

students in the centre, the door is closed and there are two teachers and one caregiver to look after the students. Even the parents who stay in the centre with their children also take care of the children.”

View towards centre

The sub theme revealed about how much services the children were getting in social inclusion and health area. The parents' revealed that daily life skills, occupational therapy, Toilet training, Communication skills, Social and emotional development were provided in the centre to ensure the social inclusion of the students.

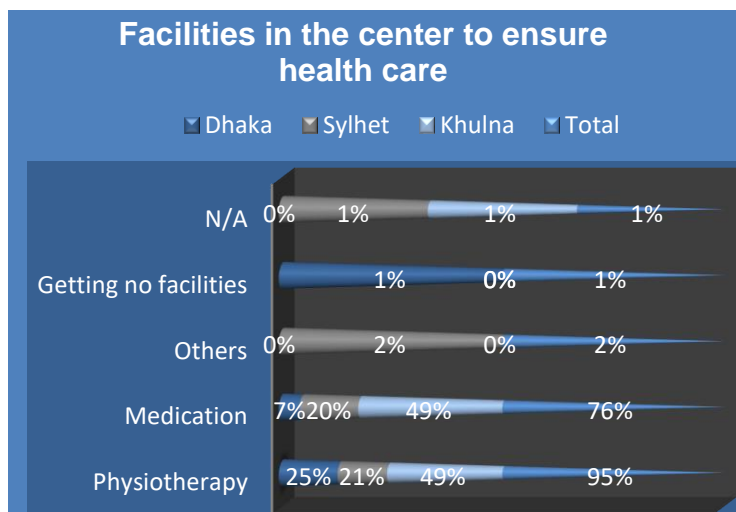
Parent commented positively on the services provided to the children for ensuring social inclusion. According to the parents' opinion daily life skills (91%), occupational therapy (91%), Toilet training (93%), Communication skills (93%), Social and emotional development (87%) were provided in the centre to



ensure social inclusion of students. According to location wise a large number of parents from Khulna reported that the children were getting social inclusion facility from the centre. From Dhaka location parents stated that among facilities their children were getting occupational therapy facility less (21%).

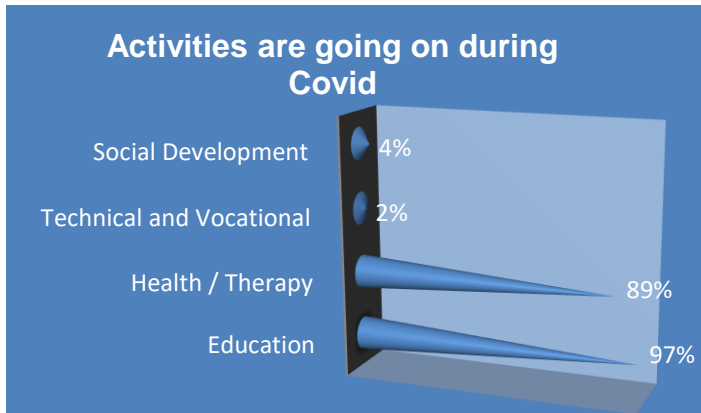
Children were treated carefully in the centre

and they were appropriately facilitated on health issue. The graph showed that facilities like Physiotherapy (95%), Medication (76%) etc. were provided to ensure health care. Only 1% children did not get any facility according to the parents. According to location wise Both Khulna and Sylhet were getting all the health care facilities only 1% parents from Dhaka stated that they did not get any facilities.



4.2.5 Mechanism during COVID situation

The sub theme described that how the centres were running during COVID-19 situation. According to the quantitative data most of the parents stated that the



education and therapy services were going on through mobile. Only few responded that vocational and technical services were also going on.

The Centres' activities were going on during the pandemic period. The graph showed that 98% of parents

answered that the activities of the centres were going on during COVID-19 situation only 2% answered negatively.

Although government called shut down to all the educational institution but mostly education and therapy services were provided to the children during pandemic period. Most of the parents stated that during COVID-19 situation only education (97%) and health or therapy (89%) was going on. Other services like technical and vocational (2%) and social development (4%) were going on in few places.

“Due to COVID-19 situation all the centres are closed for long time so to cheer up the students' motivation we are continuing with online classes so that they do not feel lonely at home.”
- Sr. Programme Manager, BEP, BRAC

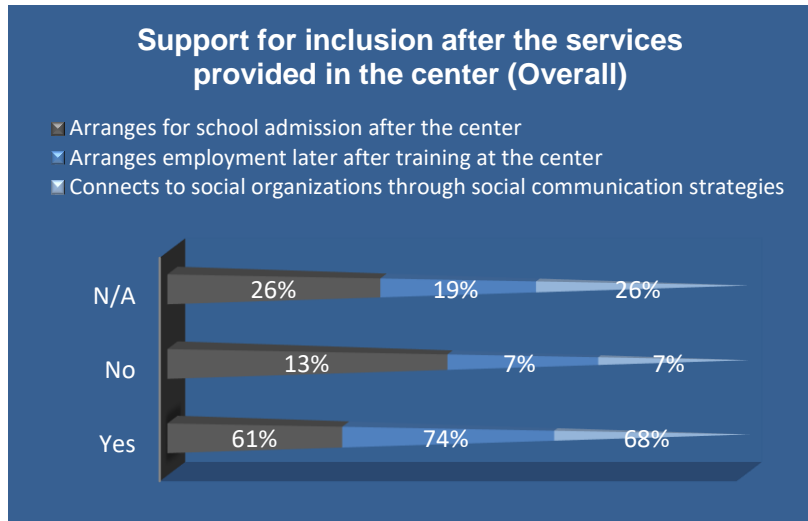
Direct services from the centre and face to face learning remained closed during the COVID-19 period. However, the service activities of the centre were running in distance mode. The mobile phones and other means were used. From the graph it was seen that 97% of students received education and therapy services over mobile. Only 3% students were getting face to face education and 2% students did not get any services according to the parents.

All the centres remained closed because of COVID-19 situation as government of Bangladesh ordered to shut all educational institutions. The teachers were taking classes through mobile. The parents were helping them to attend to the classes. Teachers were giving instruction and parents were practicing the work with their children. In some places where Covid-19 situation improved teachers and caregivers were doing home visit every week and also showing the parents how to do the vocational work with their children. The vocational services were required some materials which were provided by Aarong so teachers had started this service now as they had started their home visit. To do the therapy and other practices with their children now teachers were providing video. The

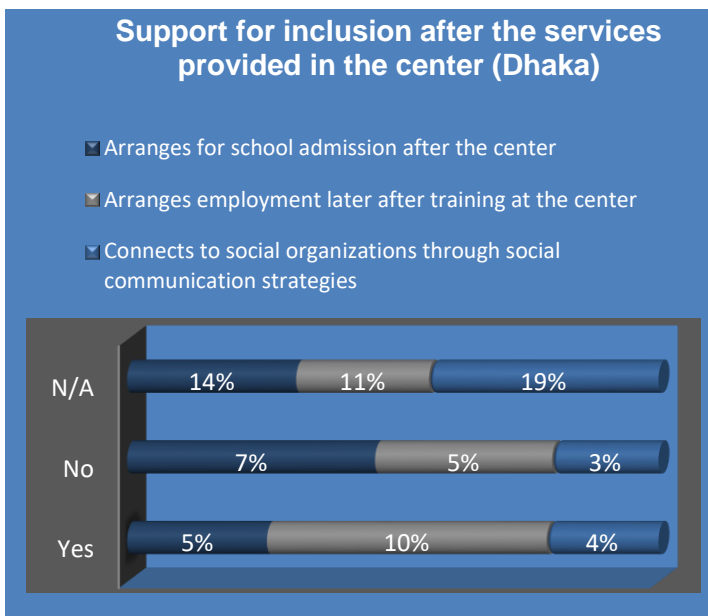
same statement was received from BRAC policy level staff during FGD. They stated that online classes were continuing only to keep touch with the children and their parents so they would not feel detach.

4.2.6. Transition to inclusion

After completing the centre education if the teachers felt that the students were able to go to normal school or vocational services then they helped them to enrol in mainstream school which was revealed in qualitative data. From the quantitative data parents also shared that the centre provided the



support in educational transition, vocational or social inclusion.



After completing the centre education if the teachers felt that the students were able to go to normal school or vocational services then they helped them to enrol in mainstream school which was revealed in qualitative data. From the quantitative data parents also shared that the

centre provided the support in educational transition, vocational or social inclusion. After the completion of the centre activities, the students would have received support from the centre for the educational, social and vocational inclusion.

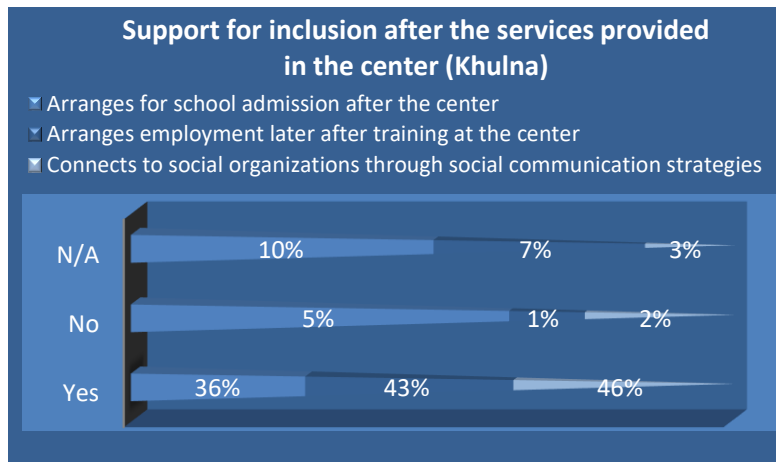
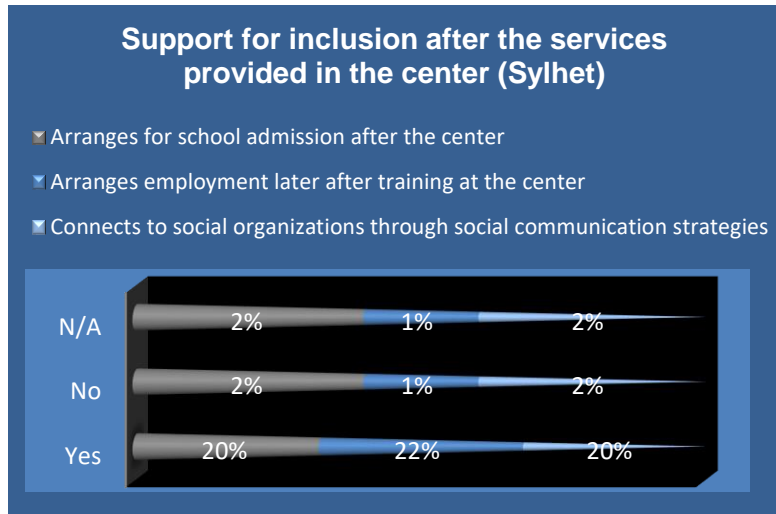
As above graph, 61%, 74% and 68% of parents gave positive feedback in the favour of getting education, social and vocational support respectively. On the other hand, 13%, 7% and 7% of parents gave negative feedback in

favour of education, social and vocational support respectively. It should be noted that 26%, 19% and 26% of parents said that they did not know anything about getting education, social and vocational inclusion support respectively.

The NDD centre provided crucial support after the services provided in the centre. Parents commented positively on this issue and they were so pleased having this kind of support.

According to location wise

most of the parents from Khulna location gave positive feedback on getting education (36%), social (46%) and vocational (43%) support for inclusion. From Sylhet location the response was average on getting education (20%), social (20%) and vocational (22%) support for inclusion. However from Dhaka location least parents gave positive response on getting education (5%), social (4%) and vocational (10%) support for inclusion.



The qualitative data showed that an inclusive class started in one project location and which was a great success. The children with NDD had shown improvement in many aspects after getting involved with the normal children. The normal children also responded quite positive. The students had helped the students with NDD not only in their study but also in their other activities.

4.2.7 Challenges

Under the sub theme the challenges of services of the centres were discussed. The challenges were divided into five dimensions: challenge in education service, challenge in vocational service, challenge in health service, challenge in social inclusion and challenge in COVID situation. Lastly parental perception about the challenges also discussed.

4.2.7.1 Challenge in Education service

In education service there were challenge in teaching materials, challenge in trained teachers, challenge in number of sit of students with NDD

“There are only 2 tabs for 20 students and it is too difficult to teach all students with these. Besides, we need a multimedia projector. Apart from this we also need a TV with big screen

-Caregiver of Sylhet NDD Centre

and challenge in refresher training for the teachers. Though most of the respondents had echoed that there was less challenge or deficiency of the materials however few teachers, caregivers and students felt the need of more tabs, laptops in their centres.

“If we get more trained teachers with us then we will be able to focus more on all the students easily, effectively and wisely”

-Teacher from Dhaka NDD Centre

Even the BRAC staff also agreed that they had shortage of electronic teaching materials as budget constraint. They

revealed in the FGD that for better learning the students were needed more devices. Apart from this in all the centres the teachers were dealing with at least 10 children with NDD of different age at a time. They had reported that they felt sometimes really difficult to deal with 10 children at one time though they had one care giver with them however that was not enough. The BRAC staff also highlighted this challenge and they recommended that if the parents could help the teachers then it would be more manageable.

From FGD with BRAC staff it was revealed that only 20-22 students were allowed to be admitted in one

“To run the centre there is a need of skilled team where there will be doctor, therapist, trained trainers etc.”

- Central Level Staff of BRAC

shift if there would be more number of students then they would make another shift. They also added that they only gave to priority to female children and most vulnerable children who could come to the centre by themselves or by the help of their parents. From BRAC the teachers and other staffs received foundation and in service training. From FGD it was found that for want of skilled trainer and shortage of budget they could not provide refresher training every year.

4.2.7.2 Challenge in Vocational service

There were few challenges in vocational services of the centres. Sometimes there was no skilled person to train the students. Even some teachers stated

“If the project demands to train the NDD students for vocational inclusion then we will arrange training programme so the students can work outside after getting the training.”

-Senior Programme Manager, BEP, BRAC

that they had got basic trainings however still they felt the need of training how to use new technology. Though the students were working with Aarong vocational programme still there

was no student who had got the chance to work out of the centre.

To address the issue from policy level different initiatives had planned to execute. From the data findings it was found that they were taking initiatives to train the children with NDD so they could work outside.

Apart from this during the COVID situation the vocational services had hampered as they could not provide the materials to the students.

In terms of providing the products to Aarong and the demands of their products got hampered also due to COVID-19 situation. As most of their products were only for children and those products were sold in especial occasion only so both parties were in trouble about the pricing.

“As we have to think about the risk management issue for the NDD students when we plan to increase the product line however now we think to make some daily basis product where we are going to involve the NDD students so there will be balancing.”

-Senior Manager, Aarong

4.2.7.3 Challenge in Health service

The services were going on according to the children’s need however in one project location the medical service was off for few years. The teachers, parents have reported about the situation. One teacher from Dhaka stated that, “**The regular medical service was provided before but it remained closed for several years.**” The teachers reported about the parents that they were less

aware about the regular medical check-up as most of the parents were from poor family. They were very busy to earn their livelihood and paid less attention if they were asked to take their children for medical check-up even though the centre was paying all the expenses. From FGD with BRAC staff it was found that to get the government health services they had to face many difficulties like waiting in long queue, want of enough therapist and doctors. In the project locations it was seen that in the government health care units there was lacking of doctors and therapists as a result parents had to wait for the services in some cases they did not get the service in time.

4.2.7.4 Challenge in Social inclusion

In some cases the teachers of NDD centre felt that if students with NDD were enrolled in general school, the teachers and students would not accept them properly. They also thought that the teachers of general schools were not well prepared about how to deal with these children.

4.2.7.5 Challenge in COVID situation

Due to COVID-19 situation there were challenge in taking classes, challenge in providing services such as therapy and vocational services. Taking classes through mobile was very difficult especially for this kind of students. Because, teachers had used different materials and techniques in a physical class to control the children however in their home they did not have this kind of facility. Teachers could only demonstrate very easy therapy what the parents could do with them .Because through mobile they could not show or do difficult therapy.

“If we could provide the teaching materials to the students it would be more beneficial for them. At least they could practice with those at home.”

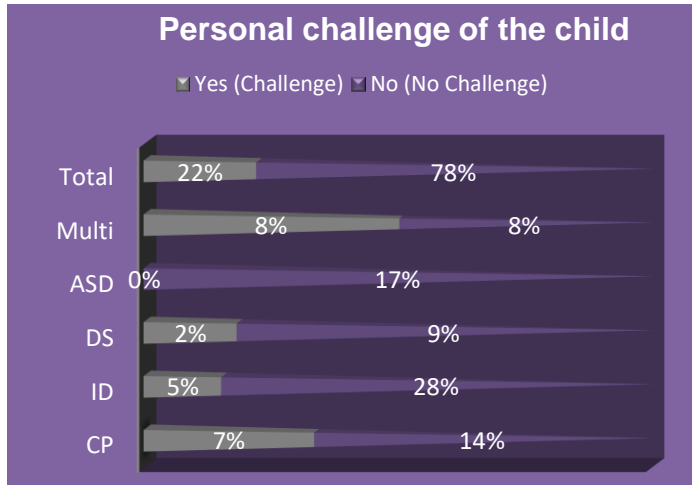
-Teacher from Dhaka NDD Centre

As the students could hardly understand teachers' instruction because of their disability so they got distracted easily and

their social development were getting hampered. At the beginning of the online class the teachers could not start the vocational class. They had started the class now as they were doing home visit. However there was still need of teaching materials and for want of these materials students could not learn properly which was reported by the teachers. Apart from these most of the parents had to go outside for their livelihood so it was difficult to match the time with parents and also in some cases parents did not have mobile.

4.2.7.6 Parental view about challenges

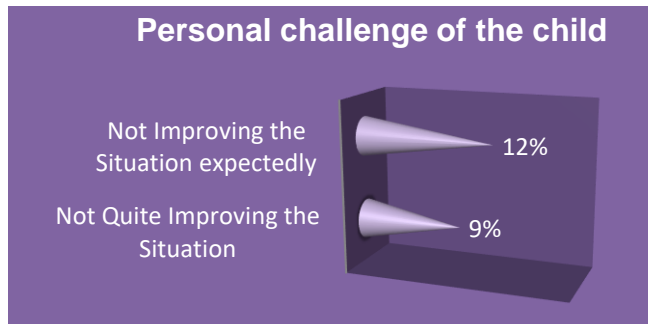
It was found from the parent census that some children had some challenges that remained unresolved after coming to the centre though they got regular services from the centre. Fortunately the number was very low who still felt the challenges.



²Most of the children did not face any personal challenge of the child which cannot be solved even after coming to the centre.

It was seen in the previous graph that 78% of parents felt that there was no personal problem (As parents' opinion here personal problem the term refers that the

condition of the child did not improve according to their parents' expectation or the condition of the child did not improve at all) of their children which was not solved after coming to the centre. Only 22% parents responded that there were still some personal challenges which were not solved yet those were the condition of the child did not improve how they expected and the condition of the child did not improve.



Findings and analysis of objective 3

4.3 Attitude of the stakeholders

Under the theme the attitudes and views of parents, students of NDD centre, community member, teachers, caregivers and policy level stake holders of were revealed.

² ASD= Autism spectrum disorder; DS= Down syndrome; ID= Intellectual disable; CP= Cerebral palsy; Multi= Combining two or more types of disabilities.

4.3.1 Parental and other stake holders’ attitude

Under the sub theme parental and other stakeholders’ attitude towards centre, towards staff, parental overall attitude, parental expectation about child and parental perception about child’s future plan were discussed.

Parental and other stake holders’ attitude towards centre

Most of the stakeholders showed positive attitude towards the support and services of the NDD centres. The impact of the centres for both parents and children with disability were quite remarkable though there was no baseline data so only from the current situation analysis stated the findings. The NDD centres had changed their life in a positive way. One teacher from Dhaka reported that, “The children with disability have got new life after joining the centre.”

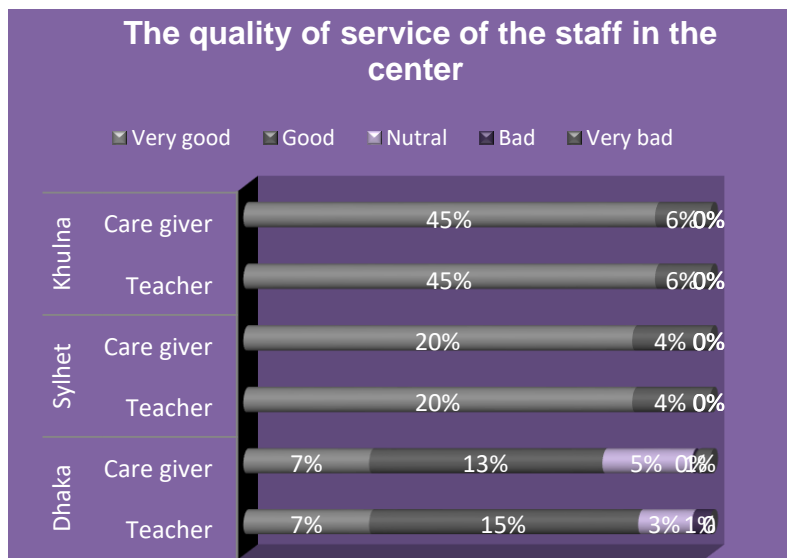
All of the respondents (students from the NDD centres) reported that they liked to come to the centres. Because here they could play, dance, sing and most importantly they could learn new things.

The community members had also shared good opinion about the services of the centres. They were getting astonished about the changes among the children with NDD. The community members reported that because of these centres the parents were more relieved and they were very happy with their services. Even the teachers also said that the community people were so happy about their services. If the centres faced any trouble the community people helped them to solve. One community member from Dhaka echoed that, “The centre is for poor people. The children of poor people are coming to this centre and getting therapy service which is a great help for them.”

Parental attitude towards staff

The quantitative data described the similar findings. Most of the parents were satisfied with the service of the staff.

Most of the parents were satisfied with the quality and behaviour of the teachers, caregivers and other staff of the



centres. The graph showed that 72% of parents commented that the quality and behaviour of teachers and caregivers were very good. On the other hand only 1% of parents were not satisfied with the quality of service and behaviour of teachers and caregivers. 3% and 5% of parents did not comment on the quality of service and behaviour of teachers and caregivers, respectively. According to location wise parents from Khulna were most satisfied (45%) and from Dhaka 1% parents reported that both teachers and caregivers were very bad.

Other stake holders' attitude towards staff

The qualitative data revealed that most of the stakeholders expressed very positive attitude towards the staff. The teachers and caregivers were well trained and they knew how to deal with the children. One community member from Sylhet stated that, **“I think handling this kind children is a tough job and the teachers and caregivers are doing it patiently so parents now can feel relax for few hours.”**

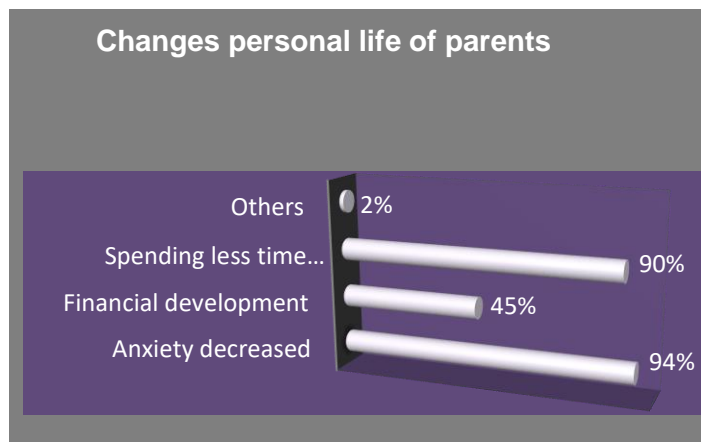
He community member also added that, after sending the children to centre, the relationship between children and parents had become better as now the parents could have some time for themselves. From the quantitative data the parents had revealed the same thing.

The children of the centres were quiet pleased with the teachers. They reported that in the centre they could play, dance and learn poem.

Overall parental attitude

From the interview data findings it was mentioned by most of the participants that before admitting into the centre the life of both parents and children with disability were so un-balanced.

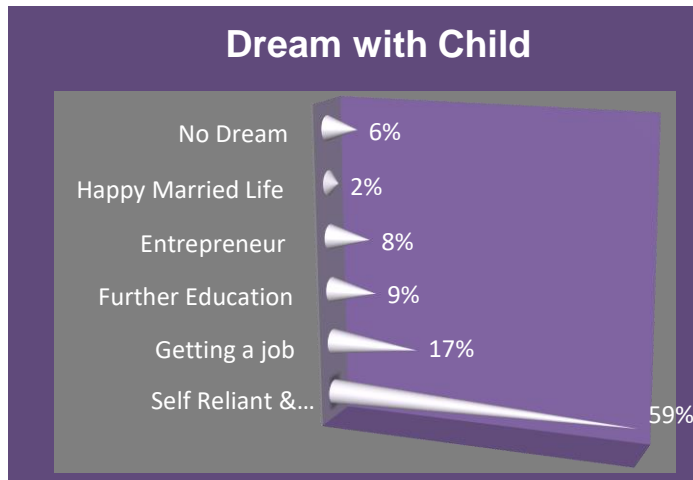
After admitting the child to the centre the parents commented that their anxiety decreased, spend less time behind the child, financially developed etc. The graph showed that 94% of parents answered that their anxiety had reduced and 90% of parents said that they were spending less time



behind the child and 45 % of parents had developed financially.

Parental expectation about child

Before the establishment of the centre, for every parent having children with disability was a curse. They felt so miserable specially the poor people. When the centre was established and parents have realized the benefit of the centre as their children were improving day by day.



From the quantitative data parents' different expectation for their child were disclosed and all this were possible because of the centres.

Parents of children with disability had different dreams with their child and most of them thought their child would be treated like other normal member

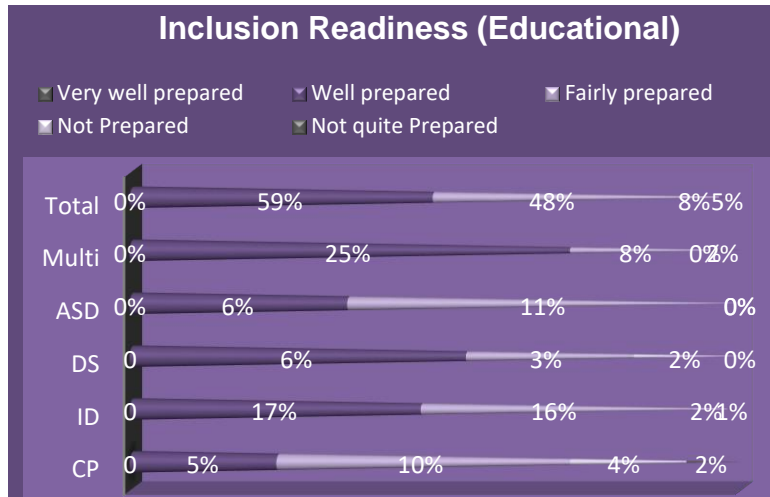
of the society. The data from above graph showed that parents had different dreams about their children with disability .Like other normal children their children would be self-reliant, do job, got married, do further education, be entrepreneur etc. Among the participated parents of children with disability, 59% of parents dreamed that their children would be self-reliant and be able to lead a normal life and 17% of parents hoped for their children to get a job. The other dreams of the parents were to do further education (9%), be Entrepreneur (8%), and lead a happy married life (2%). Only 2% of parents had no dream about their children.

Parental perception about child's future plan

The sub theme described the parents' perception about their children future. After getting the services from the centres and realizing the improvement of their children the parents were expecting about their child's inclusion to education, social or vocational area. None of the parents thought that their children were very well prepared. Less than 40 % parents thought that their children were prepared for the inclusion. For the vocational inclusion it was less than 20%.

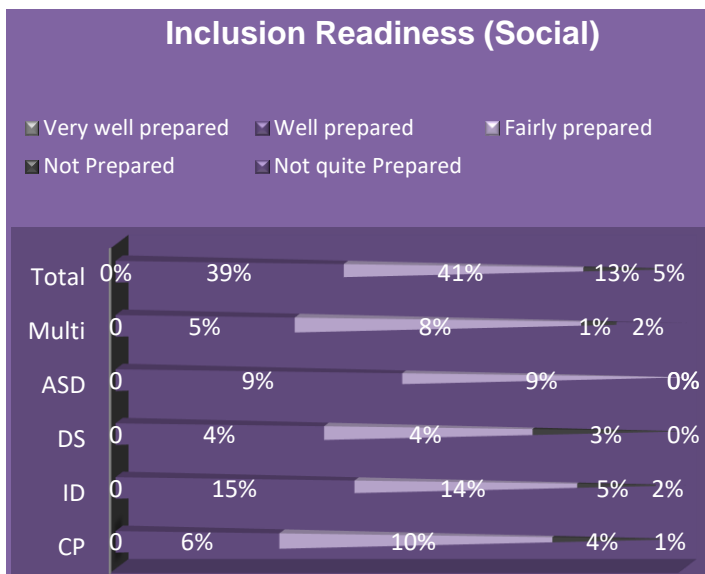
Parents commented differently on the child's inclusion readiness. It was seen from the above graph that in the case of educational inclusion readiness, according to 59% of parents thought that their children were well prepared which was meant that the children with disability were pretty much prepared to

enter in a normal school. The other 48% of parents thought that their children were fairly prepared which was meant that children with disabilities with some assistance could enter in normal school. In this case 8% of parents opined that their children



were not prepared which was meant that the children with disability need more time to enter in a normal school. The rest 5% of parents stated that their children were not prepared at all which was meant that the children with disabilities would never be able to enter in normal school. Among the type of NDD students most 25% multiple children were most who are well prepared and least 5% CP children were well prepared. The 2% CP children, 1% ID children and 2% multiple children were not prepared at all.

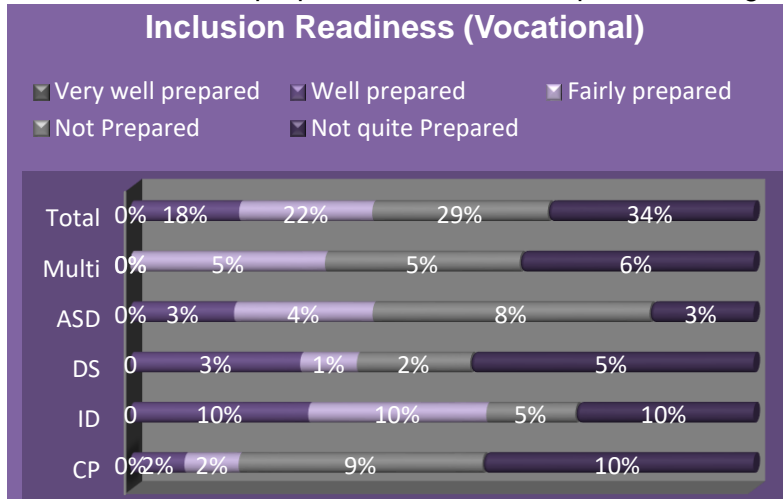
In the case of social inclusion readiness, according to 39% of parents thought that their children



that their children were well prepared, while 41% of parents thought that children fairly prepared, 13% of parents opined that their children were not prepared and 5% of parents stated that their children were not prepared at all. According to NDD type wise most 15% DS children were well prepared and least 5% multiple children were well prepared. Among the types of

NDD 1% CP children, 2% ID children and 2% multiple children were not prepared at all.

In the case of vocational inclusion readiness, according to 18% of parents thought that their children were well prepared, while 22% of parents thought fairly prepared, 29% of parents opined that their children were not prepared and other 34% of parents opined children were not prepared at all. According to NDD type wise most 10% ID children were well prepared and least 0%



multiple children were well prepared. In terms of not prepared at all 10% CP children, 10% ID children, 5% DS children 3% ASD children and 6% multiple children.³

4.3.2 Policy level attitude

Under the sub theme the attitude of government people, achievements of the project, embedding NDD into Aarong initiative and future plan of the project were discussed.

Government attitude

The qualitative data analysis showed that government schools were welcoming for all types of disabilities from mild to moderate level but there was no specific facility for NDD children.

If BRAC is going to share their programme and success story about their NDD project with us then our higher authority will think and if they find it good initiative, they can also collaborate with BRAC as government has no specific programme for NDD

-Government Staff from DPE

The government staff from the Department of Primary Education (DPE) stated that, “In the government school now 1 lac 20 thousand students with all types of disability are studying according to our database however we do not have any particular information about NDD students.”

³ ASD= Autism spectrum disorder; DS= Down syndrome; ID= Intellectual disable; CP= Cerebral palsy; Multi= Combining two or more types of disabilities.

Regarding the curriculum programme from the data it was identified that only the National Curriculum Textbook Board (NCTB) was responsible for curriculum modification. So it was suggested from the government staff that,

Achievements

The data interpretation from FGD with BRAC staff it was found that through the project interventions they had become successful to develop the cognitive area of these children and could involve them with Aarong vocational programme. They also did a great work in therapy sector as many children had improved a lot and parents also had received the therapy training so they could practice with their children. In mainstreaming there were few success stories as few children with NDD got the chance to enrol in. They had become able to give these children a quality life. Now the children with NDD had become disciplined, they could do their daily living activities, they had become social and they were participating in sports also. The teachers also reported that apart from the education, health, vocational and social services the centres were also giving some financial support like during the COVID situation the centre had provided a fixed amount of money or food items to all the parents of three locations. The centre also took necessary steps to get the disability stipend from the government for the children with disability. In some cases if the children with NDD need any extra machine for hearing or wheel chair, the centre also tried to provide it. One teacher from Sylhet stated that, **“We have provided hearing aid to two multiple disability students named Rozina and Rekha.”**

“We are going to sign an MOU with government about disability screening and assistive device support so along with this a transition programme can also be included.”

- Director, Brac Education Programme, BRAC

In collaboration with government soon there would be assistance from the government regarding the screening and assistive devices which was

found from the policy level staff.

Embedding NDD into Aarong initiative

To empower the children with NDD the advance training on vocational activities was provided for 6 teacher & staffs and 16 students on jewellery making in the BRAC Learning Centre. Trained staff and teachers were conducting training as class routine for adolescents with NDD in the centre. An agreement was signed with Aarong on Jewellery products of NDD students. As purchasing order of Aarong, NDD student's products were providing regularly. Student could make jewellery and other items demanded by Aarong. Aarong authority was so pleased with students' vocational activities. Students delivered the products on time.

Future plan of the project

As the project was running since 2014 so the staffs had clear idea about the children. The BRAC staffs shared that the students who were good at academic sector, they would educate them till grade 5-6 then they involve them in vocational work as per their interest. They also shared that if the government would take over the project then it would be a great achievement because sometimes we had to face difficulty getting donor to run the programme fruitfully. The government had all the facilities and manpower so if they wanted they could run the programme easily.

Chapter Five

Discussions and Recommendations

This chapter critically discusses the analysed findings of the study with an aim of responding the objectives of the study. The first objective was to assess the initiatives of NDD centres on individual development and social rights, second objective was to analyse institutional capabilities and implication and third objective was to analyse perception of the stakeholders. Based on the critical discussion, specific recommendations have been drawn for parents, centre, service level and mainstreaming and sustainability of NDD centres.

Discussion

- In regards to objective 1, the data interpretation revealed that all centres were providing support in two dimensions individual development and social development.
- For individual development the services were provided in education, vocational and health area. In education area the main target of the centres were to prepare the students for primary level.
- Not only in the academic education but also the centre was providing vocational training to the students according to their level and interest.
- For social development the centre had some remarkable initiatives and it was known that social inclusion for the children with NDD was most important part.
- Students were ready for social and vocational inclusion though according to the parents their children were better prepared for educational and vocational inclusion rather than social.
- Parents, teachers and other stakeholders reported that in the area of physical, emotional, intellectual, social, skills and development,

linguistic and communication had shown positive improvement among them.

- For the parents, the centre is like a bloom. The children with NDD are now valued in their family as well as in the community and their relationship with family members have improved.
- Through the therapy and medication service from the centre, the improvement which is shown in the children is like a miracle according to the teachers, parents and community members.
- For vocational establishment, they included the children in Aarong vocational programme and the children were earning money.
- To establish the social inclusion the centres had taken steps like in one location they started an inclusive class programme.
- The data findings it was revealed that inclusive class activities had been a great achievement as both NDD students and non-disable students were benefited.
- The centres took necessary steps to ensure the government disability stipend to the students.
- From the BRAC fund few supports had been provided to establish a tailoring shop for a student who was very good at tailoring as a social inclusion.
- A noticeable finding was that male parents were less involved both with the centre activity and children. So in the parents' census most of the female parents had responded and among the three locations, more parents from Khulna stated that the condition of their child was good and least parents from Dhaka revealed that the condition of their child was good.
- In reference to research objective 2, the overall capacity of the centres in three locations were same only in Khulna there were found two centres in different locations.
- From the teachers and centre observation it was seen that the teachers were using play based materials, sensory materials to teach the students.
- As the main focus of the project was to give the children with NDD a quality life so teachers were more focused about how to make them self-reliant than making them academically strong.
- Teachers were also using tabs for better understanding though there were only two tabs for 20 students.

- From the data findings the teachers revealed that, According to doctor's assessment the teachers made IEP/PLP for the child and under the supervision of therapist the teachers and caregivers gave the child therapeutic service.
- The teachers and the caregivers stated that if the children need any assistive device like hearing aid or wheel chair, it was provided from the BRAC fund.
- Apart from the technical support during COVID-19 situation the centres had provided some financial support to all the parents.
- Teachers and other staff were well trained though few teachers and caregivers had suggested that they need more refreshers training.
- From the BRAC staff it was understood that because of the budgetary constraint and for want of skilled trainer, the training were not providing regularly.
- In terms of parents expectation and satisfaction both level had matched which was seen from the data findings.
- Among the services most parents were satisfied about the therapy services of the centre and least satisfied about the vocational services.
- During the COVID-19 situation the physical services were closed and teachers were giving services through mobile phone.
- The teachers revealed that they were giving only educational and easy therapy services to the children with the help of parents and few days back they started their vocational services as earlier the situation was not so favourable that they could provide the materials to the parents.
- Regards to objective 3, Most of the stakeholders showed positive attitude towards the support and services of the NDD centres.
- It was stated by the community members and teachers that before going to the NDD centre the life of both parents and children with disability were quite different.
- The NDD centres changed their life in a positive way. They also added that the children with disability got new life after joining the centre.
- The students of NDD centres revealed that they liked to come to the centres. Because in the centre they could play, dance, sing and most importantly they learn new things.
- In few locations the stakeholders were surprised about the improvement of the children. The parents were quite positive about the behaviours of

the staff. Most of the parents were satisfied about the overall development of their children and they started dreaming about their children that they would be self-reliant and do their work independently.

- In terms of educational, social and vocational inclusion most parents had reported that their children were well prepared for education inclusion and fewer parents had reported that their children were well prepared for vocational inclusion.
- The teachers also added that there were some students who already went to the normal school however there were no students who could go any particular vocational institute except the Aarong vocational programme.
- In line with other data review it was found that the children have become able to live a quality life. Now they have become disciplined, they can do their daily living activities, they have become social and they are participating in sports also.
- In terms of collaboration with government both BRAC and government staff have showed positive attitude which was found in data review. Not only the collaboration even the BRAC policy level staff also agreed to include the children with NDD in their other programmes for further support.

Recommendations:

Parent:

- From the data review it was found that male parents had less involvement both with centre and their children. There should be more programmes on how to increase male engagement.
- From the teachers it was revealed that some parents were still unconscious about their child like taking their child for medical check-up or attending the online classes regularly. So there should be more programmes for parents' awareness.
- From the data findings it was identified that there was lacking of man power if the centre take necessary programme to involve the parents with the centre activity it will be a great idea.
- Parents need to be more encouraged to practice activities with their child at their home and also therapy services.

Centre:

- In the assessment procedure the child was labelled as ID, ASD, CP, DS or Multiple. Instead of labelling them it could be only NDD and the

teachers should get more in service training on assessment so they could functionally assess the child.

- Few parents were not satisfied about the safety services so if the centre could start a pick up and drop service for all the students then the attendance of the students could be improve.
- The centre could train the teachers for assessment of the children, they could at least do the functional assessment and it could be one alternative of the doctor.
- There should be more programmes to encourage the teachers to use the assistive device for the students in writing.

Services:

- From the data review it was identified that almost 50% students were well prepared for inclusion so there should be more programme on social emotional inclusion, vocational inclusion and literacy inclusion.
- The parents were less satisfied about the vocational services of the centres so the services could be improved.
- During the COVID period the social services were hampered most according to the parents so there could be some programme taken to overcome the loss.
- From the policy level staff it was found that if the project demands to train the NDD students for vocational inclusion then they will arrange training programme so the students can work outside after getting the training.
- From the policy level staff it was known that they are going to sign a MOU with government about disability screening and assistive device support so along with this a transition programme can also be included.

Mainstreaming and sustainability of NDD centres

- It was suggested from the policy level staff that the project should be integrated project where education, health, social inclusion will be separate dimension.
- As a project there were some financial bindings if the project and the success stories are going to disseminate with Government and if they approve it then instead of separate centres the government schools could be used and more students could be cover up.

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