A study of the status of access facilities available for children with disabilities studying in BMC school at Mumbai

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ABSTRACT

The present study titled “A study of the status of access facilities available for children with disabilities studying in BMC school”, a descriptive survey designed was made with the aim to study the status of access facility available for the children with disabilities viz. hearing impairment, mental retardation, physically handicapped (Locomotors Disability), visually handicapped in BMC recognized schools. Further to give recommendation in order to promote the access needs for children with disabilities in school. Looking into the prospective of the study it also aim to create an awareness on the issue of barrier free environment for children with disabilities. As a part of the tool of the study, self-made questionnaire was developed and validated by a group of professionals. 10 BMC recognized schools were selected in and around Mumbai and the questionnaire was administered by the researcher and taken information from the school principal. Mean average and percentage was calculated from the obtained data. On an average, overall 14.38% schools or centers with disabilities were having access facilities for students with disabilities. With respect to schools or centers related to Locomotors Disabilities, Hearing Disabilities, Mental Retardation, and Visually Handicapped study findings were 14.4%, 14.3%, 13.7% and 15.1% respectively, having access facilities for the children with disabilities in BMC schools. Where the data was subjected to statistical analysis and it was found that there was no significant difference (p>0.05) in terms of access facilities between the schools or centers for disabilities. Results indicated that there were very insufficient as well as inadequate access facilities across all children with disabilities in the BMC recognized schools. The results has shown an impact in the education of the disabled students as they need full accessible educational support to undertake their successful study. Hence, Government and all other educational authorities are suggested to take up this issue in a positive manner to improve the quality of education as there is a much needed access facilities in all the schools.

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1. Introduction

The issue of access needs to public buildings has received little attention in our country, leading to the deprivation of a large number of people from enjoying their legal rights on an equal footing with other members of the society. As a result, disability has caused many problems at family and societal levels, because persons with disabilities have been deprived of accessing their human rights such as the rights to health and education and other human rights, they have been unable to utilize their talents and their families cannot properly look after them as there are no special rehabilitation and care centers.¹ Considering the needs of education for children with disabilities, access facilities is one of the most important requirements to meet the needs for higher education of the disabled children for their all-round development. The present study entitled “A study
of the status of access facilities available for children with disabilities studying in BMC School is aimed at assessing the status of access facilities available in BMC schools for the children with disabilities. The research design of present study is of descriptive survey type.2,3

1.1. Need of study

Education has made the people long way to go which is critical to earning power. It is careers oriented and could not advance without investing in their education. But now the type of networking opportunities available that men enjoyed through online education during COVID-19 pandemic period that brings progress in individual career growth. There is a further distinction between explicit values education and implicit values education where explicit values education is associated with those different pedagogies, methods or programmes that teachers or educators use in order to create learning experiences for students when it comes to value questions. Education has both intellectual and economic value. Education encourages imagination, creativity and interest in knowledge.4,5 It also gives students more opportunities for high-paying jobs and offers better economic security. There is a valuable relationship among the access needs and education that implicit a significant outcome and success essentially for the students with disabilities in schools.

1.2. Review of literature

In analyzing the views towards the use of access technology in education of children with disabilities stated that though technology helps in study during counseling program, they could not utilize those properly at school due to unavailability of audio and video cassettes and they demanded for supply of cassettes. Valenta, A. et. al. (2001) strongly presented their opinion in favor of application of access technology to school instruction and it is very much important for independent learning too. Children with disabilities are often unable to go to school because of unsuitable school buildings.6 In addition, there is a limited understanding within their communities and among teachers about their learning needs, which is often fueled by prejudices around disability.

Banik (2006) studied the barrier free environment required for the persons with hearing impairment for work palaces, public palaces, schools, community centers and various other palaces. (2) He has developed a screening Performa for assessment cum access audit for the barrier free environment. In his study found that most of the access audit reports indicated that there is lack of barrier free facility available in the country for the persons with hearing impairment.7,8 Government needs to give attention in this area as per the PWD Act 1995 where such provision has been made to create adequate barrier free facilities in all the palaces for the person with disabilities.9

Aim of the study was to find the status of access facility available for the children with disabilities viz. hearing impairment, mental retardation, physically handicapped, visually handicapped and multiple disabled and to give recommendation for promoting the access needs.10 Objectives of the study were to find the status of the access facility available for children with disabilities in BMC School across disabilities and to give recommendation for further improvements.

2. Materials and Methods

The present study was a survey method based on single group i.e. BMC school only. All the schools selected were of BMC schools in Mumbai.11 For research tool a Self-developed questionnaire in English was used for data collection. The tool was validated by the professionals and finalized accordingly.

A Pilot Study with Purposive sampling of two schools was conducted and also reliability and validity of the pilot study were checked.12 Ten number of BMC School in and around greater Mumbai were selected and information were obtained from the school principals. The data obtained was kept confidential and not used for some other purposes or misinterpreted which cause technical and administrative problems. Hence no details of the schools will be revealed in any case for ever.13 In the questionnaire which items were available were given the score as one and the items was not ablative no not given any score for statistical purposes.14,15

2.1. Data analysis

Analysis is crucial process of research. Analysis of data refers to organizing the data, tabulating it into a manageable and understandable form. Analysing of data consists of descriptive analysis and inferential analysis. The researcher used descriptive and inferential statistical technique for data analysis and draw the conclusion. In the present study, the following descriptive analysis was used. Mean value and percentage were calculated and outcome of the results were discussed in the dissertation accordingly.

3. Discussion

Nowadays every Government is giving priority in Education as a part of human right essential to the life of an individual. After all education provides opportunities for personal, social and academic development and it is important for future employment and integration in society.16 The school setting is one of the first places that children learn to relate to and interact with one another. It is often in relation to their peers that children begin to develop a perception of themselves and of the world around them. As such, a student’s experience in school can have a major effect on
Table 1: Status of access facility available for children with physically handicapped (locomotors disability) in BMC school

| S. No | Types of Disability                        | No of sample | Facilities for disabled children in BMC School | Mean | Percentage |
|-------|------------------------------------------|--------------|-----------------------------------------------|------|------------|
| 1     | Physically handicapped (Locomotors disability) | N = 10       | (i) Ramps in school buildings.                 | 9    | 90%        |
|       |                                           |              | (ii) Least restricted environment              | 9    | 90%        |
|       |                                           |              | (iii) Space for movement,                       | 10   | 100%       |
|       |                                           |              | (iv) Resource room                              | 10   | 100%       |
|       |                                           |              | (v) TV/radio facility                           | 8    | 80%        |
|       |                                           |              | (vi) Projectors in classroom                    | 8    | 80%        |
|       |                                           |              | (v) Smart board in classroom                    | 4    | 40%        |
|       |                                           |              | (vi) Computers / wifi                           | 9    | 90%        |
|       |                                           |              | (vii) Library accessibility                     | 9    | 90%        |
|       |                                           |              | (viii) Accessible hostel facility               | 1    | 10%        |
|       |                                           |              | (ix) Accessible toilet                          | 8    | 80%        |
|       |                                           |              | (x) Accessible lift facility                    | 1    | 10%        |
|       |                                           |              | (xi) Online teaching facility                   | 2    | 20%        |
|       |                                           |              | (xii) Wheel chair                               | 8    | 80%        |
|       |                                           |              | (xiii) Walker                                   | 8    | 80%        |
|       |                                           |              | (xiv) Rollator                                  | 2    | 20%        |
|       |                                           |              | (xv) Standing frame                             | 9    | 90%        |
|       |                                           |              | (xvi) Quadripod                                 | 4    | 40%        |
|       |                                           |              | (xvii) Tetrapod                                 | 4    | 40%        |
|       |                                           |              | (xviii) Elbow crutches                          | 5    | 50%        |
|       |                                           |              | (xix) Cerebral palsy chair                      | 8    | 80%        |
|       |                                           |              | (xx) Steel roller support for walk to / corridor / upstairs | 8   | 80%        |
|       |                                           |              | Total                                           | 144  |            |
|       |                                           |              | Mean average                                    | 14.4 | 14.4%      |

Interpretation: The average percentage of facilities available for the orthopedic students in BMC School is 14.4% for the orthopedic handicapped children.

his or her self-image and self-esteem, and on his or her development in later life.17

A survey study conducted by on awareness of barrier free environment for children with hearing impairment in inclusive schools of Banik (2006) result indicated that teachers were more aware towards examination related barriers while least aware towards environmental barriers in schools. (2) A significant correlation was found between the awareness about instructional barriers and the educational qualifications of the teachers, on the other hand no significant correlation was found between awareness about barrier free environment and their educational qualifications, age and their teaching experiences. The concept of inclusive education for disabled students in India is very new. Before the children with hearing impairment have been studying in special school hence the inclusive school teachers possessing more teaching experience have not dealt with such children. So they are not aware about the barriers coming in the education of children with hearing impairment. Thus teaching experience does not count for a positive association with awareness about barriers free environment.

In another study by Dupoux et al. (2006) reported on Teachers attitudes towards students with disabilities in Haiti which concluded that years of experience was not correlated with attitudes toward integration, which showed that the actual teaching experiences of teachers were less important in predicting attitudes than the teacher’s own ideas and beliefs. Hence, Dupoux et al. (2006) study suggests that adequate education and technical input is necessary to create a good barrier free environment go better rehabilitation for children with hearing impairment in inclusive schools.18 A hearing impaired child face too many problem for them at every step of life these parries creates many problem in the education of hearing impaired child, so it is necessary to have knowledge about barrier free environment for the regular school class teachers so that adequate barrier free environment can be created in schools for better rehabilitation which has recommended for further study with large samples. The present study also gives the same message that disabled students need more facilitation to have the better educational needs for which teachers working in schools sets up required more awareness and training to deal with the disabled students in BMC schools in Mumbai.

The Human Rights Commission emphasizes the Education and Disability as Human Rights Issues in Indian Education System, a consultation policy paper evolved
which identified human rights issues in education. The Commission invited feedback from interested parties, through written submissions and participation in public hearings, on the issues identified in the consultation paper, and on other human rights issues in education. The response was overwhelming and came from a wide range of interested parties.

Moreover, students may have various physical disabilities arising from conditions such as congenital deformities, spina bifida and/or hydrocephalus, muscular dystrophy, cerebral palsy, brittle bones, haemophilia, cystic fibrosis or severe accidental injury. It is important to state that there is no necessary direct correlation between the degree of physical disability and the inability to cope with the school curriculum, apart from the elements involving physical activity having support with accessibility. Students with severe physical disability may have minimal special educational needs, while those with minimal physical disability may have serious learning needs. Physical access can be a major concern for students who have physical disabilities as those who use wheelchairs, braces, crutches, rollators, canes or prostheses, or those who fatigue easily may have difficulty moving around a school campus. Hence, accessible education is important and essential.

The present study result found that 14.3% access facilities were available for the students with hearing disabilities in BMC schools. Although the government’s agenda to universalize elementary education, and its commitment to the Directive Principles of the Constitution, are guided by the recognition that a new universal system of education should be based on equity, the redressal of past imbalances, and the provision of access to quality education, especially for marginalized groups. Recent educational developments and the Seventy Third and Seventy Fourth Constitutional Amendments outline the possibility of entrusting basic education to the local elected bodies in towns and villages. This would allow for community participation in education at the elementary level and would introduce radical change, leading to the empowerment of learners with special educational needs. Hence, there is much needs yet to improve the access facilities in schools to support the education to the herring disabled.

There is a wide range of inclusive teaching strategies that can assist all students to learn but there are some specific strategies that are useful in teaching a group which includes students with hearing impairments. In considering alternative forms of assessment, equal opportunity, not a guaranteed outcome, is the objective. Professionals are not expected to lower standards to accommodate students with a disability, but rather are required to give them a reasonable opportunity to demonstrate what they have learned. It is important to recognize that reasonable accommodation is a means by which conditions for equal participation can be achieved, as it requires the burden of accommodation to be in proportion to the capacity of the entity. In the draft Comprehensive and Integral and International Convention on Protection and Promotion of the Rights and Dignity of Persons with Disabilities, “reasonable accommodation” has been defined as the “introduction of necessary and appropriate measures to enable a person with a disability fully to enjoy fundamental rights and freedoms and to have access without prejudice to all structures, processes, public services, goods, information, and other systems.”

As per the National Policy of Education (1986) in India, Education is recognized and legislated as a fundamental social good. A publicly funded education system, accessible to all, is recognized as a core responsibility of the Government. At the international level, various United Nations conventions recognize the importance of education to persons with disabilities, including the Covenant on Economic, Social and Cultural Rights, the Convention on the Rights of the Child, and the Declaration of the Rights of Disabled Persons with provisions of accessible educational needs.

The right of every child to education is proclaimed in the Universal Declaration of Human Rights (1948) and was strongly reaffirmed by the Jomtien World Declaration of Education for All (1990). Furthermore, the Standard Rules on the Equalization of Opportunities for Persons with Disabilities (1993) was an important resolution to improve the educational conditions of persons with disabilities. This had major implications for the Indian situation in the form of three legislative Acts; The Rehabilitation Council of India Act, 1992 (RCI Act), the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995 (PWD Act), and the National Trust for Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities Act, 1999. While the RCI Act was solely concerned with manpower development for the rehabilitation of persons with disabilities, the PWD Act comprises 14 chapters and is a significant endeavour to empower persons with disabilities and promote their equality and participation by eliminating discrimination of all kinds. It emphasizes the need to prepare a comprehensive education scheme that will make various provisions for transport facilities, removal of architectural barriers, supply of books, uniforms, and other materials, the grant of scholarships, suitable modification of the examination system, restructuring of curriculum, providing amanuensis to blind and low vision students, and setting up of appropriate fora for the redressal of grievances. The National Trust Act aims at providing total care to persons with mental retardation and cerebral palsy and also manages the properties bequeathed to the trust. 4.3 Changing Role of Special Schools Special schools have been set up in the past and provisions have been made for
Table 2: Status of access facility available for children with hearing disability in BMC School

| S. No | Types of Disability | Facilities for Disabled children in BMC School | Mean | Percentage |
|-------|---------------------|-----------------------------------------------|------|------------|
| 2     | Hearing disability  | (i) Use of communication board 8 80%          |      |            |
|       |                     | (ii) Use of sign language board 4 40%        |      |            |
|       |                     | (iii) Space for movement. 10 100%            |      |            |
|       |                     | (iv) Resource room in school 9 90%           |      |            |
|       |                     | (v) TV/radio facility in school 9 90%         |      |            |
|       |                     | (vi) Projectors in classroom 8 80%           |      |            |
|       |                     | (v) Smart board in classroom 4 40%            |      |            |
|       |                     | (vi) Computers/Wi-Fi in school 9 90%         |      |            |
|       |                     | (vii) Library accessibility in school 9 90%   |      |            |
|       |                     | (viii) Accessible hostel facility 4 40%      |      |            |
|       |                     | (ix) Accessible toilet facility 8 80%        |      |            |
|       |                     | (x) Accessible lift facility 2 20%           |      |            |
|       |                     | (xi) Online teaching facility 3 30%          |      |            |
|       |                     | (xii) Loop induction system in classroom teaching 8 80% | | |
|       |                     | (xiii) Hardwire system in classroom teaching 8 80% | | |
|       |                     | (xiv) FM or Infrared system in classroom teaching 10 10% | | |
|       |                     | (xv) Classroom acoustics facility 5 50%      |      |            |
|       |                     | (xvi) Accessible website in school 8 80%     |      |            |
|       |                     | (xvii) Accessible curriculum 8 80%           |      |            |
|       |                     | (xviii) Sign language interpreter 2 20%      |      |            |
|       |                     | (xix) Accessible examination facility 8 80%  |      |            |
|       |                     | (xx) Speech therapy facility 8 80%           |      |            |
|       |                     | Total 143                                    |      |            |
|       |                     | Average 14.3 14.3%                           |      |            |

Interpretation: The average percentage of facilities available for the hearing handicapped students in BMC School is 14.3% for the hearing disabled children.

Integrated education. Considering the access facilities i.e. 14.3% for hearing disabled, the school authorities should give an immediate attention to look into this matter to support the educational needs.

Mental retardation is defined as a condition that includes below-average intellectual function and a lack of typical daily living skills. Students enrolled in a special education (special education) degree program discover basic methods to help individuals with intellectual disabilities learn. Children with mental disabilities are 10 times less likely to attend school than those without. Even if they attend school, they are more likely to drop out early while the level of schooling they receive is frequently below that of their peers. The primary goal of education for this group is to increase self-sufficiency by teaching functional academics and other skills needed in everyday life across home, community, work, and leisure domains. Depending on the student’s abilities (conceptual, social, and practical), needs for support (intermittent to pervasive), and school placement, the educational focus and methods will vary. The socioeconomic level of the community influences the quality of special education and the amount of support an individual receives in school and during adult life.

The Human Rights sets the principle that each persons with disabilities should feel a part of the community and able to contribute fully to the development and well-being of the community and the Province. The Government guarantees the right to equal treatment in education, without discrimination on the ground of disability, as part of the protection for equal treatment in services. This protection applies to elementary and secondary schools, colleges and universities, both public and private sector. Further Children with mental disabilities are often unable to go to school because of unsuitable school buildings or improper access facilities needed for their friendly education. In addition, there is a limited understanding within their communities and among teachers about their learning needs, which is often fueled by prejudices around disability. The present study indicated that only 13.7% access facilities were available in BMC School for the education of mentally retarded children which was very unscientific.

The Opportunity to succeed in education and to Achieving Barrier-free Education for Students with Disabilities in school is the biggest concern in school. It canvases human rights issues that arise in the provision of education to students with disabilities, it outlines actions
Table 3: Status of access facility available for children with mentally handicapped in BMC school

| S. No | Types of Disability | Facilities for Disabled children in BMC School | Mean | Percentage |
|-------|---------------------|-----------------------------------------------|------|------------|
| 3     | Mentally handicapped | (i) Use of communication bard 8               | 8    | 80%        |
|       |                     | (ii) use of sign langue board 2               | 2    | 20%        |
|       |                     | (iii) Space for movement. 10                 | 10   | 100%       |
|       |                     | (iv) Resource room in school 9               | 9    | 90%        |
|       |                     | (v) TV/ Radio facility in school 9           | 9    | 90%        |
|       |                     | (vi) Projectors in classroom 8               | 8    | 80%        |
|       |                     | (v) Smart board in classroom 2               | 2    | 20%        |
|       |                     | (vi) Computers / Wi-Fi in school 9           | 9    | 90%        |
|       |                     | (vii) Library accessibility in school 9     | 9    | 90%        |
|       |                     | (viii) Accessible hostel facility 10        | 10   | 10%        |
|       |                     | (ix) Accessible toilet facility 8           | 8    | 80%        |
|       |                     | (x) Accessible lift facility 10             | 10   | 10%        |
|       |                     | (xi) Online teaching facility 2             | 2    | 20%        |
|       |                     | (xii) Adequate teaching learning material in classroom. 8 80% |
|       |                     | (xiii) Adequate paly therapy material for MR. 8 80% |
|       |                     | (xiv) Language development kit. 5           | 5    | 50%        |
|       |                     | (xv) Cognitive skill development kit for MR. 5 50% |
|       |                     | (xvi) Accessible website in school 8        | 8    | 80%        |
|       |                     | (xvii) Accessible curriculum 8              | 8    | 80%        |
|       |                     | (xviii) Sign language interpreter 10        | 10   | 10%        |
|       |                     | (xix) Accessible examination facility for MR children 8 80% |
|       |                     | (xx) Speech therapy facility 8              | 8    | 80%        |
|       |                     | Total 137                                   | 137  | 13.7%      |

Interpretation: The average percentage of facilities available for the mentally handicapped students in BMC School is 13.7% for the mentally disabled children.

required by parties to the accommodation process to promote compliance with human rights law and policy and sets out the Commission’s own commitments in this regard. It is apparent that many students with disabilities do not have equal access to educational opportunities in India, either at the primary and secondary school, or at the post-secondary level. The key barriers are inadequate funding, physical inaccessibility, cumbersome and time-consuming accommodation processes, negative attitudes and stereotypes, and a lack of understanding of the rights and responsibilities of all the responsible people.

Accommodation is not always provided in a timely manner. It is often insufficient, and sometimes, is not provided at all. There are delays at many stages of the accommodation process that a large backlog in the processing of claims for special education funding, long waiting lists for professional assessments, and delays in the provision of special education programs and services. In some cases, disputes about accommodation have caused students to lose substantial amounts of time in school. Children and youth cannot afford to wait for accommodations that will provide them with the opportunity to access education services equally. Educational institutions have a responsibility to deal with accommodation effectively and quickly as educational opportunities delayed can have serious and permanent effects.

Every student is unique whether it is normal or disabled. All students have particular strengths, needs, and goals. Most students will require support at one time or another in order to reach their potential. Students with disabilities are individuals first and foremost, and should be treated as such. Blanket approaches to accommodation that rely on categories, labels and generalizations will not work. For example, rigid application of suspension and expulsion policies that do not take into account a student’s individual circumstances and are implemented with stereotypical assumptions run the risk of having a disproportionate and discriminatory impact on students with disabilities and other individuals and groups protected by the Code.

Not all students with disabilities who experience discrimination will do so in the same way. For example, students with disabilities may also be members of other historically disadvantaged groups. The discrimination they
experience may be based on more than one ground, and these grounds may intersect producing unique experiences of discrimination. In order to fully recognize and account for the complex ways in which many people experience discrimination, an individual approach to discrimination analysis and accommodation assessment is needed.

The accommodation of students with disabilities is a shared responsibility. Everyone among educators, school staff, government officials, school boards, parents and students themselves must take responsibility for becoming informed about disability and education issues to ensure that students with disabilities can count on a welcoming and inclusive environment. Everyone needs to work together to ensure equal access to education for students with disabilities. When it comes to ascertaining the needs of a student for the purposes of developing an Individual Education Plan, for example, the student’s principal, teachers, and any special education professionals with whom the student has worked should co-operate with the student’s parents and the student, where appropriate, to devise the most effective plan. Everyone has an interest in providing all students with the opportunity to reach their potential.

The Ministry of Human Resource Development, Government of India envisages that Education must co-operate with school boards and schools to develop more effective mechanisms to monitor the progress of students with disabilities and the effectiveness of specific accommodation measures. Likewise, the Ministry of Training and Employment, Colleges and Universities must work together with universities and colleges to develop better systems of accountability in accommodating students with disabilities.

Hence, from the present study revealed that only 13.7% access facilities available for the students with mental disabilities which is not sufficient for supporting the education for mentally retarded students and schools authorities need to look into this matter to improve the quality of educational services for disable students with immediate concerns.

The outlines the actions which schools for visually impaired and school boards, post-secondary institutions, government school, and other responsible parties are expected to take to address the access issues for visually impaired. These actions are designed to address the concerns raised by participants in the consultation, to promote compliance by education providers with their legal obligations under the Code, and to ensure that students with visual disabilities are receiving equal treatment in the context of educational services. As well, the PWD Act 1995 has committed to monitoring progress on these issues, promoting understanding and awareness by communicating with parties, developing educational tools, and undertaking public education activities.

Encourage Governments to actively implement the paradigm shift from a charity-based approach to a right-based approach to the development of persons with disabilities and to move towards the human rights perspectives, especially the perspectives of the right to development for persons with disabilities, bearing in mind UN General Assembly resolution 56/168 of 19 December 2001 on a comprehensive and integral international convention to promote and protect the rights and dignity of persons with disabilities. Present study was also indicated the same phenomenon making the disabled person perspectives, the school education system should be more comprehensive and accessible with the change of new educational technology that will bring the support to the disable students for their higher education.

In order to assist parties to understand their roles and responsibilities, the Chief Commissioner for Persons with Disabilities, Government of India has released Guidelines on Accessible Education as a companion piece. The Guidelines was rely on key principles outlined in the Code and the Commission’s Policy and Guidelines on Disability and the Duty to Accommodate and apply them to the education context. The Guidelines was discussed with disability, discussed prima facie discrimination because of disability, and identify the parameters of the duty to accommodate, assess undue hardship, and provide suggestions for accommodation planning in the education context as well.

It is the Chief Commissioner’s for PWDs expectation that this access facilities will promote dialogue among individuals, institutions and school involved in BMC school systems and will result in progressive steps being taken towards ensuring that all students with disabilities are provided with the opportunity to succeed in school essentially for visually impaired.

Based on the findings of access facilities available i.e. 15.1% for visually disabled students at BMC School, it is suggested that authorities should be remembered that while there are costs associated with providing certain forms of accommodation and support to students with visual disabilities, there are lifelong costs to not providing these supports. The elements requires education providers to accommodate students with disabilities up to the point of undue hardship. Participants in the consultation repeatedly identified inadequate funding as a serious barrier for students with disabilities. Part of the duty to accommodate includes providing the resources that children and youth with visual disabilities need to have the opportunity to succeed in education with the appropriate support access facilities in school required for them.

On an average, overall 14.38% schools or centers with disabilities were having access facilities for students with disabilities. With respect to schools or centres related to Locomotors Disabilities, Hearing Disabilities, Mental
Table 4: Status of access facility available for children with visually handicapped in BMC school

| S. No | Types of Disability | Types of Disability | Facilities for Disabled children in BMC School | Mean | Percentage |
|-------|---------------------|---------------------|-----------------------------------------------|------|------------|
| 4     | Visually Handicapped| N = 10              | (i) Taylor frame with arithmetic types (250 grams) with packing box. | 8    | 80%        |
|       |                     |                     | (ii) Tactile Geometry Kit with 20 raising sheets. | 8    | 80%        |
|       |                     |                     | (iii) Space for movement for VI. | 10   | 100%       |
|       |                     |                     | (iv) Resource Room for VI in school | 9    | 90%        |
|       |                     |                     | (v) Radio Facility in school | 9    | 90%        |
|       |                     |                     | (vi) Abacus (Inclusive Design), | 8    | 80%        |
|       |                     |                     | (vii) Two Braille scales (6” and 12”) (Inclusive Design). | 2    | 20%        |
|       |                     |                     | (viii) Computers with Jaws software/ Wi-Fi in school | 9    | 90%        |
|       |                     |                     | (ix) Accessible Hostel facility | 10   | 10%        |
|       |                     |                     | (x) Accessible Toilet facility | 8    | 80%        |
|       |                     |                     | (xi) Online Teaching Facility | 2    | 20%        |
|       |                     |                     | (xii) Adequate teaching learning material in classroom for VI. | 9    | 90%        |
|       |                     |                     | (xiii) Adequate paly therapy material / Tape recorder for VI. | 8    | 80%        |
|       |                     |                     | (xiv) Braille Reader equipment for VI children. | 5    | 50%        |
|       |                     |                     | (xv) Cognitive skill development kit for MR. | 5    | 50%        |
|       |                     |                     | (xvi) Accessible website in school | 8    | 80%        |
|       |                     |                     | (xvii) Talking calculator | 8    | 80%        |
|       |                     |                     | (xviii) Smart Cane / talking Cane | 8    | 80%        |
|       |                     |                     | (xix) Accessible examination facility for VI children | 8    | 80%        |
|       |                     |                     | (xx) Other rehabilitation material for VI children in school | 8    | 80%        |
|       |                     |                     | **Total** | 151 |
|       |                     |                     | **Average** | 15.1 |

Interpretation: The average percentage of facilities available for the visually handicapped students in BMC School is 15.1% for the mentally disabled children.

Table 5: Overall statues of access facilities available among all disabled children in BMC school in Mumbai.

| S. No | Types of Disability      | No of sample | Total Mean | Mean Average | Percentage | Significance of p-value |
|-------|--------------------------|--------------|------------|--------------|------------|-------------------------|
| 1     | Locomotors disability    | 10           | 144        | 14.4         | 14.4%      | P > 0.05                |
| 2     | Hearing Disability       | 10           | 143        | 14.3         | 14.3%      | Not significant         |
| 3     | Mental Retardation       | 10           | 137        | 13.7         | 13.7%      |                         |
| 4     | Visually Handicapped     | 10           | 151        | 15.1         | 15.1%      |                         |
| 5     | Total                    | 40           | 575        | 5.75         | 14.38%     |                         |
Retardation, and Visually Handicapped study findings 14.4%, 14.3%, 13.7% and 15.1% respectively were having access facilities for the children with disabilities in BMC schools. Where the data was subjected to statistical analysis where it was found that there was no significant difference (p>0.05) in terms of access facilities between the schools or centers for disabilities. Results indicated that there were very insufficient as well as inadequate access facilities across all children with disabilities in the BMC recognized schools. The results showed an impact in the education of the disabled students as they need full accessible educational support to undertake their successful study. Hence, Government and all other educational authorities was suggested to take up this issue in a positive manner to improve the quality of education as there is a much needed access facilities in all the schools for the children of disabilities.

Overall the present study showed 14.38% access facilities available in BMC schools for the children with disabilities which were not enough. However, study further suggest to the following measures to improve the access facilities for BMC schools viz:

1. Conduct education and training for raising the awareness of the public officials including educational and school administrators and teachers’ to promote positive attitudes to the education of children of children with disabilities, increase sensitivity to the rights of children with disabilities to be educated in local schools and on practical strategies for including children youth with disabilities in regular school.

2. To provide comprehensive pre-service teacher training for all teachers, with methodology and techniques for teaching children with diverse abilities, the development of flexible curriculum, teaching and assessment strategies.

3. Encourage suitable candidates with disabilities to enter the teaching profession as per provision of Government of India.

4. Establish procedures for child screening identification and placement, child-centered and individualized teaching strategies and full systems of learning and teaching support, including resource centers and specialists teachers, in rural and urban areas.

5. Ensure the availability of appropriate and accessible teaching materials, equipment and devices, unencumbered by copyright restriction.

6. Ensure flexible and adaptable curriculum, appropriate to the abilities of individual children and relevant in the local context.

7. Ensure assessment and monitoring procedures and appropriate for diverse needs of learners.

However, Government need to implement a progressive programme towards achieving barrier free and accessible schools and accessible school transport with immediate effect. There is a lack of Accessible Documents in the filed which need to ensure that appropriate documents are made accessible as per the accessibility standards and guidelines and tested by people with disabilities to help the beneficiaries / clients meet their accessibility requirements for all educational, social and all other sectors.

3.1. Outcome of the study

On an average, overall 14.38% schools or centers with disabilities were having access facilities for students with disabilities. With respect to schools or centres related to Locomotors Disabilities, Hearing Disabilities, Mental Retardation, and Visually Handicapped study findings 14.4%, 14.3%, 13.7% and 15.1% respectively were having access facilities for the students with disabilities in BMC schools. Where the data was subjected to statistical analysis where it was found that there was no significant difference (p>0.05) in terms of access facilities between the schools or centers for disabilities. Results indicated that there were very insufficient as well as inadequate access facilities across all students with disabilities in the BMC recognized schools. The results has an impact in the education of the disabled students as they need full accessible educational support to undertake their successful study. Hence, Government and all other educational authorities need to take up this issue in a positive manner to improve the quality of education.

The present study was limited sample to BMC schools only. Based on the information, it cannot be generalized as short fall technically. It needs bigger samples or to cover entire population in the study to established a theory. Hence, it is recommended to conduct similar study with larger samples covering all the variables and parameters required on the subject.

4. Summary and Conclusion

The present study has the wider implication in the field of disability rehabilitation and education. There was a lack of information and data available in these aspects. The outcome of the study will give an overview about the status of the access facility available in school for the students with disabilities. This wills also further enhance the researcher with the significant valuable recommendations how to improve the access facilities for the disable students in schools and making their life more qualitative and productive.

Access facilities for PWDs in India is one of the hottest topics in the country these days because the nation feels that the government has never been serious in funding the education department of the country to promote the area. It is true that some of the best technologist experts and well-recognized entrepreneurs of today’s world are from India.
but the other side of the picture is stark darkness. So if someone says that India is one of the countries that needed distance learning the most, it would be fairly true. The good thing is that a lot of universities and institutes have started to offer disability studies in the country. With various online universities and courses, students have a vast choice to select their favorite distance learning program from.

The advantages of disability studies in education could not even be imagined at the moment. India is one of the largest countries in the world with its size and population and an educational revolution here could be a revolution that goes across the borders. Millions of individuals go from India to other countries every year in search of better job opportunities and many to seek better education. If these people start getting the education right in their homes, they will not need to spend thousands of dollars to go abroad for studies. However, this immigration process could only be slowed down if the quality of online education is matched with the modern education standards around the world.

Most of the students in India are interested in the information technology (IT) and business field. It is of utmost importance that these students are provided with best courses from around the world to be educated in these fields. The universities providing online distance learning must make sure to benefit from the services of the best instructors and professors from the world to educate these students. Enthusiasm is not lacking and how well the students are performing in these fields is a clear indication of what the aims and goals of today’s Indian students are. They are ready to match their pace with the modern world by acquiring modern education and getting the most updated training on information technology (IT) and business.

5. Source of Funding

None.

6. Conflict of Interest

None.

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Cite this article: Banik AA, Banik AD. A study of the status of access facilities available for children with disabilities studying in BMC school at Mumbai. IP J Otorhinolaryngol Allied Sci 2021;4(2):54-63.