IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)
e-ISSN: 2279-0853, p-ISSN: 2279-0861.Volume 25, Issue 10 Ser. 3 (October. 2026), PP 36-43
www.iosrjournals.org

Distribution and Severity of Intellectual Disability among Children Attending Special Schools in Selected Urban Areas of Odisha: A Cross-Sectional Study

Dr Kalyani Rath, Assistant Professor, School of Anthropology, Gangadhar Meher University,

Sambalpur, Odisha, India.

Mrs Monalisha Padhy, PhD research scholar, School of Anthropology, Gangadhar Meher University,

Sambalpur, Odisha, India.

ABSTRACT
Intellectual disability is characterized by neuro developmental delayed syndrome. Limitations in intellectual functioning and adaptive behaviour is a major characteristic feature of Intellectual disability. It is estimated that the global prevalence of ID is around 2-3% and 2.13% of people in India are diagnosed with such a disability. Few studies conducted in this particular subject indicate that a greater number of individuals are diagnosed as intellectually disabled in rural areas as compared to urban settings. Going by the burden associated with intellectual disability, evidence with underdeveloped states in general and Odisha in particular is limited. This study examines the prevalence and extent of intellectual disability among children attending special schools in selected urban areas of Odisha by focusing on their age and sex. Both primary and secondary data have been used for this research study. Secondary data relating to the number of schools and students enrolled were obtained from the official records of the Social Security and Empowerment of Persons with Disabilities (SSEPD) department of Odisha. Primary data was collected through a school based descriptive study which was conducted in seven special schools located in three larger municipality corporations of the state Odisha like Bhubaneswar, Cuttack and Berhampur. Followed by a pilot study, a total of 622 children were selected belonging to the age group 6-18 years who were already diagnosed with any form of intellectual disability. The study results indicate that intellectual disability has been the broader diagnosed category and is being associated with cerebral palsy, autism spectrum disorder and other associated disabilities. After analysing the data, considerable changes were found in terms of severity levels and disability categories among affected children. The studied children were categorized into three different age groups i.e. 6-10, 11-15 and 16-18. As noticed, the majority (44.69%) of intellectual disabilities are observed among the children belonging to age group 11-15 years followed by group 6-10 years. The studied sample consisted of about 65% males and 35% females. Moderate retardation is the most widespread level across almost all age groups. In the category of mental retardation, the percentage of both the sex is almost the same i.e. 66.75% for male and 67.57% for females. Cerebral Palsy is observed among 13.64% and 13.24% of males and females respectively. Though the observed difference for age-group and gender is not significant statistically, the study findings underscore the importance of generating region-specific data to inform effective policy formulation. The current study will also enable early identification and support the development of educational and health interventions for children with intellectual disabilities in Odisha.

Date of Submission: 11-10-2026 Date of Acceptance: 23-10-2026

I. INTRODUCTION

Intellectual disability (ID) labelled as Mental Retardation earlier, is a condition that interferes with learning, daily functioning and adaptation to a new environment. It is defined as "a condition of arrested or incomplete development of the mind, which is especially characterized by impairment of skills manifested during the developmental period, which contribute to the overall level of intelligence, i.e., cognitive, language, motor, and social abilities [10]. The American Association on Intellectual and Developmental Disabilities (AAIDD) defines it as "limitations both in intellectual functioning and adaptive behavior" [6]. Adaptive behavior

assesses conceptual skills (e.g., language, money and time concepts), social skills (e.g., interpersonal skills and social problem solving) and practical skills (e.g., activities of daily living, occupation) [13]. Intellectual Disability affects everyday life skills like communication, self-care, learning and social interaction needed for everyday life. The signs of Intellectual Disability usually appear in childhood and remain throughout life. People with this condition may need different levels of support depending on how severe the disability is. Intellectual functioning is commonly measured using standardized intelligent tests. "A score below 70 on an IQ test, along with difficulties in daily adaptive skills, is used to diagnose intellectual disability [26]. Based on Intellectual Disability, ID is grouped into four levels: Mild, Moderate, Severe and Profound" [26]. Most individuals with intellectual disability fall under the mild category [1]. Fewer people are affected by moderate, severe and profound forms. Each level shows how much support a person may need in daily life.

Evidence shows that "intellectual disability affects about 1-3% of the world's population" [1] and largely people of developing countries are affected. The prevalence rates are higher in low- and middle-income countries. Studies have estimated that about 30-50% of individuals in such countries are facing such difficulties [9]. Though the exact cause is unknown, a mix of genetic problems, poor nutrition, environmental factors and limited access to healthcare is responsible [9]. Moreover, problems during pregnancy or birth, brain injury after birth and other associated environmental factors leading to such conditions [10]. However, in many cases, it is very difficult to identify the exact cause.

India has the highest rate of ID of any country, a range of 1%-6.3% is reported [27], compared with 0.22–1.55% globally. Applying a rate of 1% to population figures from Census 2011, the total population living with ID would be at least 12 million including about 1.6 million under-five children [15,16]. Prevalence is higher in some States such as the Northeast States. As life expectancy of people with ID continues to increase in India and in other low-and-middle income countries (LMICs), preventing and reducing modifiable risk factors for long-term health problems from an early age is important to ensure healthy ageing and to prevent premature death [30].

Though the prevalence of ID in India is not well known, the country has the world's largest children population who are at higher risk of developmental disabilities. Earlier research shows a clear difference between rural and urban areas. Intellectual disability is more common in rural areas than in cities [8]. To improve the child's developmental activities, early identification and support are important. It allows access to early intervention services, special education planning, family counselling and community support [12].

In India the condition of intellectual disability was earlier covered under the Persons with Disabilities Act, 1995 [7]. This law was created to protect the rights of people with disabilities. It aimed to provide education, rehabilitation and social support services. In spite of having different provisions mentioned in the law the problems of intellectual disabilities still exist. These include delays in identifying intellectual disability, difficulties in proper classification, and issues with obtaining certifications of identity, gender-based intervention [31]. These challenges are more common in areas with limited resources. The current study aims to analyse a gender specific and age categorization of Intellectually disabled children enrolled in different special schools in the state of Odisha along with their typology and severity.

II. METHODOLOGY

The present study was a school-based, cross-sectional descriptive study conducted among children with intellectual disability attending selected special schools in coastal districts of Odisha state located on the eastern coast of India along the Bay of Bengal. The state comprises thirty administrative districts. Data for the current research were collected from three municipal corporations i.e. Bhubaneswar, Cuttack, and Berhampur located in the coastal districts of Khordha, Cuttack, and Ganjam, respectively. These cities were selected considering population size and presence of special schools for disabled children. As per the official website of the Social Security & Empowerment of Persons with Disabilities Department, Government of Odisha six special schools were located in Bhubaneswar and five each in Cuttack and Berhampur municipality corporation with a total enrolment of 1,017 students. Of these sixteen special schools, seven schools were selected randomly. All the children diagnosed as intellectually disabled as per DSM-V [33] were included in the study. Due to absenteeism on the days of data collection, the final sample size comprised 622 that includes children with different forms of ID i.e. Mentally Retarded (MR), Cerebral Palsy (CP), Autism, Down's Syndrome (DS) and others.

Data were analysed using SPSS version 20. Descriptive statistics such as frequencies and percentages were used. Association between gender and age group and type of disability was examined using Fisher's Exact Test due to small sample size and low expected cell frequencies. Chi-square test for linear trend was applied to assess the association between gender and level of retardation. Disability percentage between genders was compared using Mann–Whitney U test. A p-value <0.05 was considered statistically significant.

Ethical approval was obtained from the Ethics Committee of Gangadhar Meher University, Sambalpur. Written informed consent was obtained from parents or caregivers and permission was taken from the concerned school authorities prior to the study.

III. RESULT:

A total of 622 children with disabilities were included in the current study. Among them, 403 (64.8%) were males and 219 (35.2%) were females. The age and sex distribution of the study participants is presented in Table 1. The types of disability observed among the children are summarized in Table 2, while the severity of intellectual disability is shown in Table 3.

Table 1: Age and Sex Distribution of Children with Intellectual Disability (n = 622)

Age Group (Years)	Female n (%)	Male n (%)	Total n (%)
06-10	55 (31.3)	121(68.7)	176 (28.3)
11-15	103 (37.1)	175 (62.9)	278 (44.7)
16-18	61 (36.3)	107 (63.7)	168 (27.0)
TOTAL	219 (35.2)	403 (64.8)	622 (100)

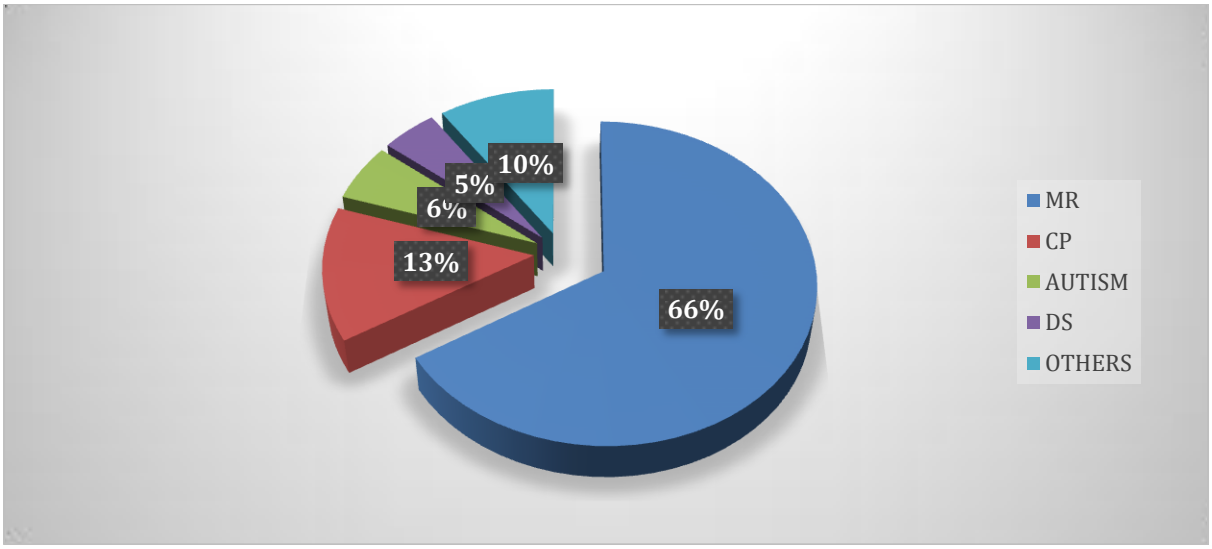
($\chi^2 = 1.384$, df = 2, p = 0.501)

The current data set is composed of intellectually disabled (ID) children of age 6 to 18 years. The children were classified into three different age groups i.e. 6-10, 11-15 and 16-18 years and majority of the children belong to the group 11-15 (44.69%) followed by 6-10 years (28.3%). The percentage of female children in all age groups is less than the male children of the same age group. The distribution of boys and girls was comparable across all three age categories. The proportion of male children was higher across all age groups. However, the Chi-square test showed that the association between age group and sex was not statistically significant ($\chi^2 = 1.384$, p = 0.501). The strength of association, as indicated by Cramer's V, was negligible (0.047), suggesting that gender does not meaningfully influence the age distribution of children attending special schools in the study area.

TABLE-02: Distribution of type of disability in accordance with the sex of the children.

Disability Type	**Female n (%)**	**Male n (%)**	**Total n (%)**
MR	148 (67.6)	265 (65.8)	413 (66.4)
CP	29 (13.2)	55 (13.6)	84 (13.5)
ASD	8 (3.7)	22 (5.5)	30 (4.8)
DS	7 (3.2)	22 (5.5)	29 (4.7)
OTHERS	27 (12.3)	39 (9.7)	66 (10.6)
TOTAL	219	403	622

$\chi^2 = 3.546$, df = 4, p = 0.471



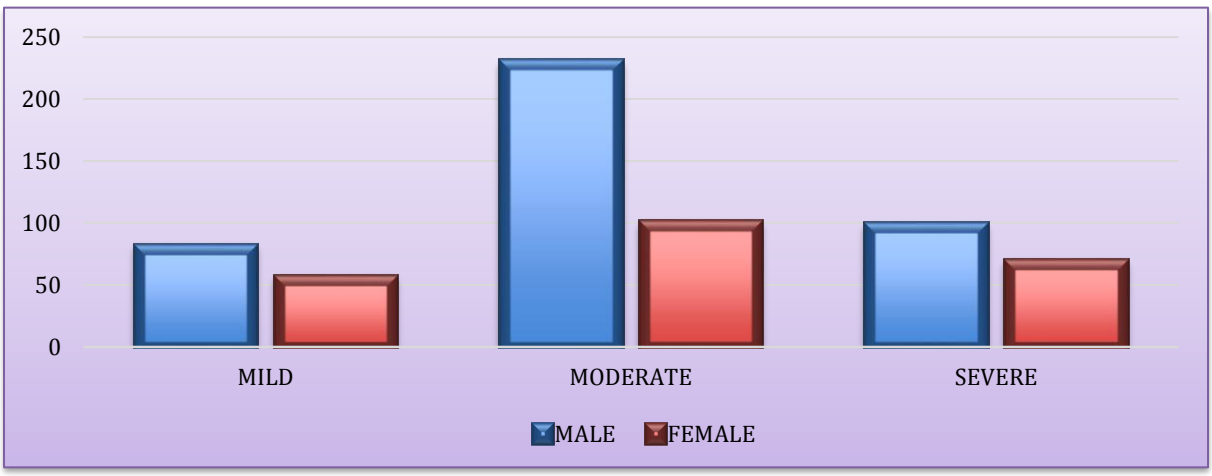
The distribution of different types of disability among the study participants is shown in Table 2. Intellectual disability constituted the majority of cases, followed by other types of disabilities. Intellectual disability (MR) constituted the majority of cases in both females (67.57%) and males (65.75%). Other conditions such as cerebral palsy, autism, Down syndrome and other disabilities were observed in smaller proportions. Children affected with Cerebral Palsy represented 13.50 percent. About 5 percent of the study participants were diagnosed with Autism. The other category depicts all disabilities like a combination of mental retardation with deaf and dumb, down syndrome with multiple disabilities represented by 10.61 percent of the studied children. However, the association between sex and type of disability was not statistically significant (χ^2 = 3.546, df = 4, p = 0.471). The strength of association was negligible (Cramer's V = 0.076), indicating comparable distribution of disability types among males and females. The findings suggest that gender does not appear to influence the type of disability among children attending the selected special schools.

Table-03 Gender wise Level of Retardation

Level of Retardation	Male	Female	Total
Mild	79 (19.60)	54 (24.65)	133 (21.38)
Moderate	228(56.57)	98 (44.74)	326 (52.41)
Severe	96(23.82)	67 (30.59)	163 (26.20)
Total	403 (100.0)	219 (100.0)	622(100.0)

* Figure in Parenthesis are percentage

χ^2= 7.965, p = 0.019



The study classified intellectual disability into three levels: mild, moderate and severe. Among the total children studied, moderate intellectual disability constituted the largest category, accounting for 326 children (52.4%). This was followed by severe intellectual disability (26.2%) and mild intellectual disability (21.4%). The predominance of moderate intellectual disability suggests that children with moderate impairment are more likely to be enrolled in special schools compared to those with severe disability. The distribution of severity levels differed significantly between boys and girls. A statistically significant association was observed between gender and level of intellectual disability (χ^2 (2) = 7.965, p = 0.019). However, the strength of association was small (Cramer's V = 0.113), indicating that gender explains only a limited variation in severity classification. However, no significant linear trend was observed across severity levels (p = 0.766).

TABLE-04: Distribution of level of retardation in relation with age

AGE	MILD	MODERATE	SEVERE	TOTAL
6-10	53 (30.1)	86 (48.1)	37 (21.0)	176
11-15	50 (18.0)	143 (51.4)	85 (30.6)	278
16-18	30 (17.9)	97(57.7)	41(24.4)	168
TOTAL	**133 (21.4)**	**326 (52.4)**	**163 (26.2)**	**622**

$\chi^2 = 14.17$, df = 4, p = 0.007

Table 4 presents the distribution of level of intellectual disability in relation to age. Among children aged 6–10 years, 48.9% were moderately disabled, while 30.1% had mild disability and 21.0% had severe disability. In the 11–15 years age group, the proportion of moderate disability remained highest (51.4%), followed by severe disability (30.6%) and mild disability (18.0%).Similarly, among children aged 16–18 years, moderate disability accounted for the majority (57.7%), followed by severe disability (24.4%) and mild disability (17.9%).A Chi-square test of independence was performed to examine the association between age group and level of intellectual disability. The analysis revealed a statistically significant association ($\chi^2 = 14.17$, df = 4, p = 0.007), indicating that the distribution of severity of intellectual disability varies significantly across different age groups.

TABLE-05: Distribution of disability percentage by sex among the children

Sex	N	Median	IQR	Minimum	Maximum
Male	403	75	70-75	50	90
Female	219	75	70-75	50	90
Total	622	75	70-75	50	90

The disability percentage among the children had a median value of 75% (IQR: 70–75). When analyzed by sex, the median disability percentage was similar among males and females. The comparison using the Mann–Whitney U test showed no statistically significant difference between the two groups (U = 43615, Z = −0.25, p = 0.802). The effect size was negligible (r = 0.01). The summary statistics are presented in Table 5, and the distribution of disability percentage by sex is illustrated in Figure 1.

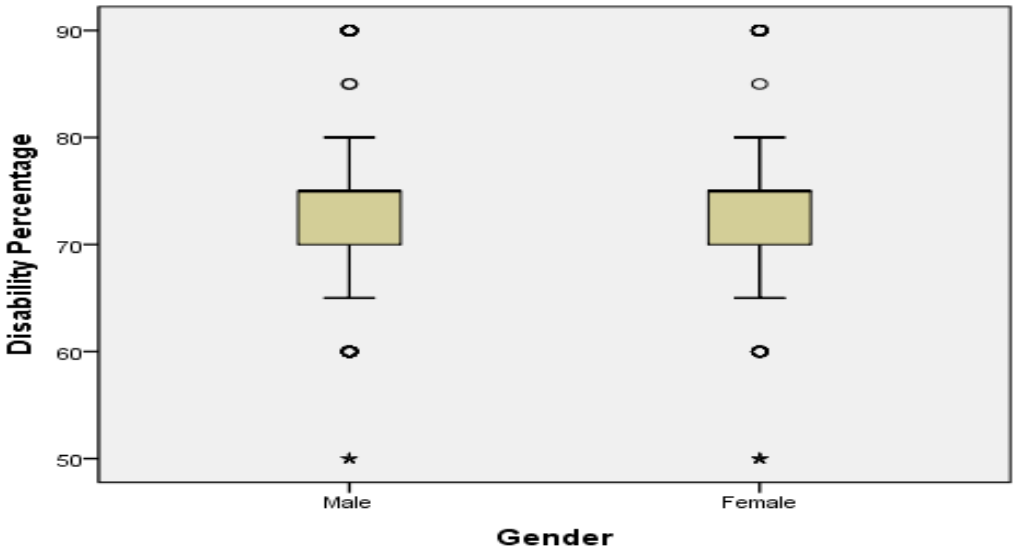


Figure 1. Box plot showing the distribution of disability percentage among male and female children.

The distribution of disability percentage among children by gender was analysed using a boxplot. The median disability percentage was found to be approximately 72–74% and was similar for both males and females, suggesting that the central tendency of disability severity does not differ substantially between the two groups. However, the presence of several outliers in both categories indicates variability in disability levels among individual children. The interquartile range (IQR) also showed a comparable spread between males and females, suggesting a similar distribution pattern of disability percentage across genders.

IV. DISCUSSION:

The present study provides a detailed assessment of the prevalence and magnitude of Intellectual Disability among children enrolled in special schools located in three major urban centres of Odisha. The findings provide state-specific evidence in an area where regional data remains scarce, despite the recognized importance of intellectual disability to public health and education. Consistent with national census reports, the study shows that intellectual disability constitutes a notable proportion of the overall disabled population of Odisha. As per data obtained from the Census (2011) 5.82 percent of people with disabilities in the state are classified as intellectually disabled, consistent with broader national and global prevalence estimates. The predominance of mental retardation as the primary diagnostic category in the present sample suggesting that intellectual disability remains the most frequently identified developmental disability in institutional settings. The current study not only focused on the prevalence it also analysed the two basic biological demographic attributes i.e. age and sex to understand the scenario of intellectual disability among the children attending different special schools of coastal Odisha.

The age distribution observed in the current study indicates a lower concentration (28.3%) of students diagnosed and attending the special schools in younger age group i.e. 6-10 years than the older age group 11-18. This trend may reflect late diagnosis, limited early detection mechanisms, and social stigma associated with disability, which can delay schooling and formal assessment. The under representation of young children highlights the need to strengthen early identification programs and increase parental awareness at the community level. Analysis by gender revealed a higher proportion of male children with intellectual disabilities, a trend that has been consistently reported in previous epidemiological studies. Biological vulnerability, gender-based access to health care, and orientation bias may collectively contribute to this disparity.

In terms of severity, moderate intellectual disability emerged as the most common category, followed by severe and mild forms. The predominance of moderate disabilities suggests that children with milder disabilities may be under-represented in special schools, possibly mainstream general education or remain unidentified. The presence of coexisting developmental disorders such as cerebral palsy, autism spectrum disorders and Down syndrome highlights the complex clinical profile of children with intellectual disabilities. These associated conditions increase functional limitations and require integrated medical, educational, and rehabilitation services. The findings reinforce existing evidence that intellectual disability rarely occurs in isolation and should be addressed within multidisciplinary intervention frameworks.

Overall, the study highlights the urgent need for comprehensive state-level surveillance, early detection programs and inclusive educational planning for children with intellectual disabilities in Odisha. Strengthening

institutional capacity, improving community-based identification and integrating health, nutrition and education services are essential to improve outcomes for affected children.

The present study examined the distribution and severity of intellectual disability among children aged 6–18 years enrolled in special schools. A total of 622 children were included in the analysis, and the findings provide important insights into the demographic and severity patterns of intellectual disability in the study population.

The results revealed that the largest proportion of children belonged to the 11–15 years age group (44.69%), followed by the 6–10 years group (28.29%) and the 16–18 years group (27.01%). The higher representation of children in the middle age group may reflect increased identification and school enrolment during the early adolescent period, when learning difficulties and developmental delays become more evident in educational settings.

Similar observations have been reported in several Indian studies where school-aged children constitute the majority of identified cases of intellectual disability, largely due to the structured environment of formal education that facilitates detection of cognitive impairment.

The study also observed that male children constituted a larger proportion of the study population compared to females. This pattern is consistent with earlier epidemiological studies, which have reported a higher prevalence of intellectual disability among males. The male predominance has often been attributed to biological vulnerability, genetic factors, and greater likelihood of referral of male children for institutional care and special education services. However, it is also possible that female children with disabilities remain under-reported or have lower access to institutional services, particularly in socio-culturally disadvantaged communities.

The present study found that moderate intellectual disability constituted the largest proportion (52.4%) of the cases, followed by severe (26.2%) and mild (21.4%) intellectual disability. The predominance of moderate disability may be explained by the fact that children with moderate impairment are more likely to be enrolled in special schools, whereas children with mild disability may remain in mainstream education and those with severe disability may experience limited school attendance due to functional limitations. Similar patterns have been reported in institutional-based studies conducted in India, where moderate levels of intellectual disability form the majority of enrolled children in special education settings.

The analysis of age-wise distribution of severity indicated that moderate intellectual disability was the most common category across all age groups. However, the proportion of severe disability was relatively higher in the 11–15 years age group.

The Chi-square test demonstrated a statistically significant association between age group and level of intellectual disability, suggesting that the severity distribution varies across different developmental stages. This may be due to differences in diagnosis, educational placement, and developmental progression over time.

The association between gender and level of intellectual disability was also examined using the Chi-square test and linear-by-linear association. The analysis indicated no statistically significant relationship between gender and severity of intellectual disability ($p > 0.05$).

This finding suggests that although male children were more numerous in the sample, the degree of intellectual impairment did not differ significantly between boys and girls. Similar results have been reported in previous studies where gender differences were observed in prevalence but not in severity patterns.

The boxplot analysis of disability percentage by gender showed that the median disability percentage was similar for both males and females, indicating comparable central tendencies in severity levels. The presence of outliers in both groups reflects variability in the degree of disability among individual children. The similarity in median values further supports the statistical findings that gender does not significantly influence the severity of intellectual disability in the present study population.

V. CONCLUSION

The present study provides important baseline information on the demographic profile and severity distribution of intellectual disability among children attending special schools in coastal Odisha. The findings revealed that moderate intellectual disability constituted the largest proportion of cases, followed by severe and mild categories. A higher proportion of male children was observed in the study population; however, the severity of intellectual disability did not differ significantly between genders. The analysis further demonstrated a statistically significant association between age group and level of intellectual disability, indicating variation in severity patterns across different developmental stages.

These findings highlight the importance of early identification, appropriate educational placement, and targeted intervention programmes for children with intellectual disabilities. Strengthening special education services, improving awareness among parents and caregivers, and promoting inclusive support systems are essential for enhancing the overall development and quality of life of children with intellectual disabilities.

REFERENCES

[1]. Maulik, P., Mascarenhas, M., Mathers, C., et al. (2011). Prevalence of intellectual disability: A meta
[2]. analysis of population-based studies. Research in Developmental Disabilities, 32(2), 419-436.
[3]. Panda, K. C. (1999). Education of exceptional children. Vikas Publishing House.
[4]. Venkataswamy Reddy, M., & Chandrashekar, C. R. (1998). Prevalence of mental and behavioural disorders in India: A meta-analysis. Indian Journal of Psychiatry, 40(2), 149–157.
[5]. Social Security and Empowerment of Persons with Disabilities (SSEPD) Department, Government of Odisha. (n.d.). Statistics on special schools and residential children. http://ssepd.gov.in
[6]. Ministry of Social Justice and Empowerment, Government of India. (2001). Guidelines for evaluation of various disabilities and procedures for certification. Gazette of India.
[7]. Luckasson, R., et al. (2002). Mental retardation: Definition, classification, and systems of supports (10th ed.). American Association on Mental Retardation.
[8]. Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995, § 26 (1995).
[9]. Ganesh Kumar, S., Das, A., Bhandary, P. V., Soans, S. J., Harsha Kumar, H. N., & Kotian, M. S. (2008). Prevalence and pattern of mental disability using Indian disability evaluation assessment scale in a rural community of Karnataka. Indian Journal of Psychiatry, 50(1), 21–23.
[10]. Campbell, S., Morgan, S., & Jackson, J. (2004). Down syndrome: Incidence and causes. Journal of Applied Research in Intellectual Disabilities, 17(2). (Note: This is frequently cited as a summary chapter in disability studies).
[11]. Armatas, V. (2009). Mental retardation: Definitions, etiology, epidemiology and diagnosis. Journal of Sport and Health Research, 1(2), 112-122.
[12]. Baird, P. A., & Sadovnick, A. D. (1985). Mental retardation in over half-a-million consecutive livebirths: An epidemiological study. American Journal of Diseases of Children, 139(12), 1257– 1260.
[13]. Cleary, M., & Green, A. (2005). Early intervention and identification of intellectual disabilities. Journal of Intellectual Disability Research, 49(2).
[14]. Johnson, C., Walker, W., Palomo-Gonzales, S., et al. (2006). Mental retardation: Diagnosis, management, and family support. Current Problems in Pediatric and Adolescent Health Care, 36, 123– 171.
[15]. Ganjiwale, D., Ganjiwale, J., Sharma, B., & Mishra, B. (2016). Quality of life and coping strategies of caregivers of children with physical and mental disabilities. Journal of Family Medicine and Primary Care, 5, 343-8.
[16]. Office of the Registrar General & Census Commissioner, India. (2001). Census of India 2001. Ministry of Home Affairs, Government of India.
[17]. Office of the Registrar General & Census Commissioner, India. (2011). Census of India 2011: Odisha state profile. Ministry of Home Affairs, Government of India.
[18]. World Health Organization. *International Classification of Diseases (ICD-11)*. Geneva: WHO.
[19]. American Association on Intellectual and Developmental Disabilities. Schalock RL et al. Intellectual Disability: Definition, Classification, and Systems of Supports.
[20]. United Nations Children's Fund. *Children with Disabilities Report.*
[21]. Indian Council of Medical Research. *Burden of Neurodevelopmental Disorders in India.*
[22]. National Institute for the Empowerment of Persons with Intellectual Disabilities. Research publications on intellectual disability.
[23]. Ministry of Social Justice and Empowerment. *Disability statistics and reports.*
[24]. Lakhan R & Ekúndayò OT (2015). Disability in India: Will increasing trends continue?
[25]. 5th ed. Washington DC: APA Press; 2013. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. [Google Scholar]
[26]. Salvador-Carulla L, Reed GM, Vaez-Azizi LM, Cooper SA, Martinez-Leal R, Bertelli M, et al. Intellectual developmental disorders: Towards a new name, definition and framework for "mental retardation/intellectual disability" in ICD-11. World Psychiatry. 2011;10:175–80. doi: 10.1002/j.2051-5545.2011.tb00045.x. [DOI] [PMC free article] [PubMed] [Google Scholar]
[27]. Global Research on Developmental Disabilities Collaborators. Developmental disabilities among children younger than 5 years in 195 countries and territories, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. The Lancet Global Health. 2018; 6(10):e1100–e21. https://doi. org/10.1016/S2214-109X(18)30309-7 PMID: 30172774
[28]. Kishore M, Udipi G, Seshadri S. Clinical practice guidelines for assessment and management of intel- lectual disability. Indian J Psychiatry. 2019; 61(Suppl S2):194–210. https://doi.org/10.4103/psychiatry. IndianJPsychiatry_507_18 PMID: 30745696
[29]. Chavan B, Rozatkar A. Intellectual disability in India: Charity to right based. Indian journal of psychiatry. 2014; 56(2):113–6. https://doi.org/10.4103/0019-5545.130477 PMID: 24891695.
[30]. Sagar R, Dandona R, Gururaj G, Dhaliwal R, Singh A, Ferrari A, et al. The burden of mental disorders across the states of India: the Global Burden of Disease Study 1990–2017. The Lancet Psychiatry. 2019. https://doi.org/10.1016/S2215-0366(19)30475-4 PMID: 31879245
[31]. Gururaj G, Varghese M, Benegal V, Rao G, Pathak K, Singh L, et al. National Mental Health Survey of India, 2015–16: Summary. Bengaluru: National Institute of Mental Health and Neuro Sciences, NIM- HANS, 2016 Contract No.: Publication No. 128.
[32]. National Institute for the Empowerment of Persons with Intellectual Disabilities (Divyangjan).
[33]. 35th Annual Report 2018–19. Secunderabad, Telangana, India: Department of Empowerment of Persons with Disabilities (Divyangjan), Ministry of Social Justice and Empowerment, Government of India, 2019.
[34]. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*. 5th ed. Arlington (VA): American Psychiatric Publishing; 2013.