Research Article

A clinical study on intellectual disability in northeastern India: insight into the sociodemographic risk factors of a developing country

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Abstract

Background: Intellectual disability (ID) is defined as "a disorder with onset during the developmental period that includes both intellectual and adaptive functioning deficits in conceptual, social, and practical domains." Many psychosocial factors influence the central nervous system of developing child and influences child's psychological development. Therefore, an attempt has been made with this study to find the nature of associations between types of ID and important sociodemographic variables in northeastern India.

Objectives: To find out the sociodemographic variables of patients with ID, distribution of ID according to its types, and correlation between types of ID with various sociodemographic variables.

Materials and Methods: A total of 100 patients above the age of 4 years were taken serially from outpatient and inpatient departments of the Department of Psychiatry, Silchar Medical College and Hospital, fulfilling the diagnostic criteria for ID according to *DSM-5*. The classification of ID was done according to the scores obtained using the following tools: Malin's Intelligence Scale for Children (MISIC), *Wechsler Adult Intelligence Scale-Third Edition*, and The Vineland Social Maturity Scale. Assessment of scoring was done by clinical psychologist, a senior faculty member of the department.

Results: Positive correlations were found among various sociodemographic factors and the presence of ID. Distribution of mild, moderate, severe, and profound ID among the study population was 42%, 40%, 17%, and 1%, respectively. We found a strong association between the distributions of ID and few important sociodemographic variables, some of which are modifiable and may help in the formulation of prevention strategies.

Conclusion: Low parental education, late presentation in health-care facilities, low-paying high laboring job of parents, and burden of belonging to lower socioeconomic strata of the society significantly contributes in development of ID.

KEY WORDS: Intellectual disability, demographics, risk factors

Introduction

Intellectual disability (ID) is a state where an individual suffers from developmental deficits resulting in significant limitation of his/her adaptive skills and cognitive abilities. *The Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition (*DSM-V*)[1] defines ID as "a disorder with onset during the developmental period that includes both intellectual and adaptive functioning deficits in conceptual, social, and practical domains." The term ID is introduced in *DSM-V* in accordance to *Rosa's law*,[2] which replaces all other synonymous terms such as "mental retardation (MR)," "mental subnormality," and "feeblemindedness," which were previously used to describe it. This change was essential to remove the derogativeness of the previous terms as well as to highlight the fact that it is a neurodevelopmental disorder that requires intervention at early period of life. The American Association on Intellectual and Developmental Disabilities (AAIDD)

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however proposed the term "Disorders of Intellectual Disability" to be used in the upcoming *International Classification of Diseases Version 11* (*ICD-11*).[3] Recent studies show that ID affects approximately 1%–4% of the world population.[4] For a developing country like India ID produces great challenges. In general, it is considered that 2% of the Indian population has this disability.[5]

The psychosocial and demographic factors surrounding an individual play a great role in his/her development. It affects one's intellectual development as well as adaptive skills. Satcher[6] from the United States stated that low maternal education, race, low socioeconomic status, and effects of "early environmental experiences (1-3 years) on both brain structure and cognitive functions", play significant role in the development of ID. Drews et al.[7] in their study found strong association between birth order, low maternal education, low socioeconomic status, and mild MR; alongside they also found that older maternal age at the time of conception may lead to severe MR. Research done in various countries have repeatedly quoted the importance of social and demographic risk factors of ID. Zheng et al. (2012)[8] in their study in China commented "There is a significant relationship between sociodemographic factors and ID," whereas Leonard et al. (2005)[9] in their study conducted in western Australia commented "The social determinants of intellectual disability (ID) are poorly understood." They also commented that many sociodemographic factors that they identified in their study can be modified; hence such studies should be encouraged as they pave the way to primary prevention. Hence, knowledge regarding the effects of those factors in the intellectually disabled persons is required to formulate appropriate interventional policies.

In India, there is a lack of sufficient number of studies on intellectually disabled subjects, more so in the northeastern part. This study aims at evaluating the prevalence of various types of intellectual disabilities according to severity in the intellectually disabled persons as well as evaluating the various related sociodemographic factors.

Materials and methods

A total of 100 patients of both sexes above the age of 4 years were selected who fulfilled the diagnostic criteria of ID according to *DSM-V*. This study was conducted in Silchar Medical College and Hospital, Silchar, which is a tertiary care hospital, after taking proper approval of the Institutional Ethics Committee. Main catchment area of this hospital is the whole Barak Valley of southern Assam, India, which comprises the districts of Cachar, Karimganj,and Hailakandi along with the neighboring states such as Manipur, Mizoram, and Tripura. Cases were selected serially from both outpatient and inpatient department of the Department of Psychiatry. We excluded patients with severe debilitating diseases, with any kind of substance abuse, if patients or guardians (in case of minors) are not willing to give their consent, and if we found that the information obtained is inadequate.

1. Description of Tools
   i. Sociodemographic proforma
      a. A standard proforma describing sociodemographic variables was used, which was designed and standardized in the Department of Psychiatry, Silchar Medical College and Hospital.
      b. The proforma contains the variables such as age, gender, religion, family type, domicile, socioeconomic status, education of subject, and education of parents.

   ii. *Diagnostic and Statistical Manual of Mental Disorders*, Fifth edition (*DSM-V*)[1] criteria were used for diagnosing ID, which states
      a. Deficits in intellectual functions, such as reasoning, problem solving, planning, abstract thinking, judgment, academic learning, and learning from experience, confirmed by both clinical assessment and individualized, standardized intelligence testing.
      b. Deficits in adaptive functioning that result in failure to meet developmental and sociocultural standards for personal independence and social responsibility. Without ongoing support, the adaptive deficits limit functioning in one or more activities of daily life, such as communication, social participation, and independent living, across multiple environments, such as home, school, work, and community.
      c. Onset of intellectual and adaptive deficits during the developmental period.

   iii. Scales used
      1. Malin's Intelligence Scale for Children (MISIC), an Indian adaptation of Wechsler Intelligence Scale for Children (WISC-III), was used for individual intelligence test for age group of 6–17 years.[10] This scale was developed by Dr. Arthur J Malin, MA, MEd, PhD of Nagpur.
      2. Wechsler Adult Intelligence Scale-Third Edition[11] was applied to subjects above 18 years.
      3. The Vineland Social Maturity Scale (VSMS)[12] was applied to assess the adaptive behavior in the subjects. The scale was originally developed by EA Doll in 1935, which was then adapted by Dr. AJ Malin in the year 1965. It is used to measure differential social capacity of an individual and it provides an estimate of social age (SA) and social quotient (SQ). VSMS shows high correlation (0.80) with intelligence and is designed to measure social maturation in eight social areas. The scale consists of 89 items divided into 13 age groups. It can be used for the age group from birth to 15 years.

The I.Q. (intelligence quotient) score estimation as well as the adaptive behavior scoring in our study was done by an experienced clinical psychologist who is a faculty of this institution.

2. Interview Procedure

After obtaining the informed consent from the subjects, or in cases where required, consents from their parents/guardians,

all subjects were interviewed without time limit, in details, using the various tools to elicit maximum data. Parents or the caregivers were also interviewed where it was necessary and confidentiality was maintained in every case.

3. Scoring

Scoring was done as described by the manuals for the three types of scales applied. That is, Malin's Intelligence Scale for Children (MISIC), Wechsler Adult Intelligence Scale-Third Edition, and the Vineland Social Maturity Scale. Based on the I.Q. scores and adaptive behavior scores obtained, the study subjects were classified as having mild, moderate, severe, or profound ID.

Statistical Analysis

Data were collected and tabulated and appropriate statistical analysis was applied wherever required. The Statistical Package for the Social Sciences (SPSS v 22) was used for analysis of the collected data. Chi-square was applied to evaluate *p* value whenever it was required, to test the significance.

Results

The sociodemographic data obtained from the subjects are tabulated in Tables 1 and 2. The mean age of the subjects was found to be 16.7 ± 10.73 years and the age ranged from 4 to 57 years. Most of the subjects belonged to the age group 11–20 years (43%). Out of 100 subjects, 59% were males and 41% females. Subjects came from urban (29%), semiurban (19%), and rural (52%) background. It was found that 46% belonged to nuclear families, 59% from joint families, and 4% from extended families. Most of the subjects were Hindus (50%) and Muslims (46%), and only 4% belonged to Christianity. It was found that illiteracy prevailed among the subjects (56%); only 33% were primary schooled and 11% had secondary education. None of the subjects had higher secondary education or above. When we looked for education of the parents, among fathers we found that most of them are primary schooled (38%), 30% were illiterate, 19% had secondary education, 5% had higher secondary education, and only 8% were graduate and above. While among mothers, illiteracy prevailed in 52%, followed by primary education (30%), secondary education (10%), and only 7% had higher secondary education and only 1 of the mothers was having a graduate degree and above. We found that parents of most of the subjects were unskilled workers (46%), followed by business (19%), and skilled worker (16%). Majority of the subjects hailed from lower (27%) or lower middle (49%) socioeconomic strata, whereas only 18% and 6% are from middle and upper middle class, respectively. Among the total number of study subjects, we found that 42% were having mild ID, 40% moderate, 17% severe, and only 1% profound ID (Figure 1). The mean I.Q.) obtained is 47.95 ± 13.0061, the minimum being 19 and

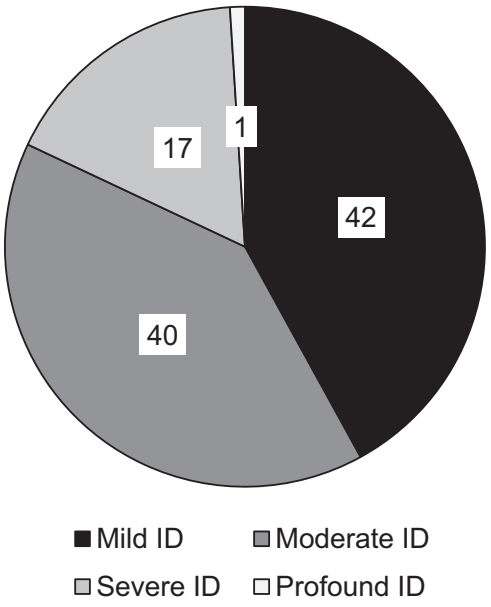

Figure 1: Pie diagram showing distribution of 100 patients with intellectual disability (ID) according to their type.

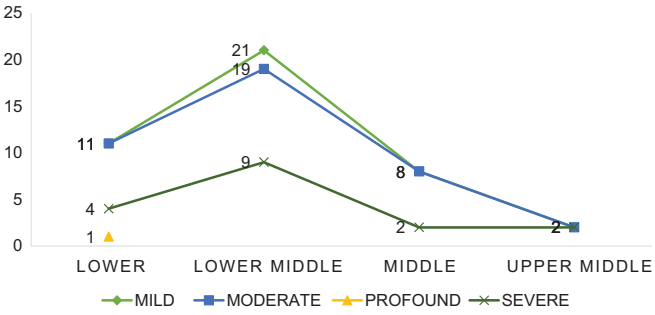

Figure 2: LINE diagram showing distribution the type of intellectual disability according to socioeconomic status.

maximum 70. The individual mean I.Q. of the various categories is tabulated in Table 3. The comparison of the sociodemographic variables among the four types of IDs is shown in Tables 4 and 5, whereas Table 6 shows the statistical association between them. While comparing, we found that most of the subjects with mild disability were aged between 11–20 years (45.2%), whereas moderate disability is found equally in 1–10 years (40%) and 11–20 years (40%). Most of the subjects with severe disability are found in the age group of 11–20 years (47.06%) and the only subject with profound disability was in the age group of 31–40 years. We found no statistically significant difference in age between the different types of intellectual disabilities (Table 6). We also observed that there is male dominance in all the four categories namely, mild (64.29%), moderate (52.5%), severe (58.82%), and profound (100%). However, this finding

Table 1: Distribution of the sociodemographic variables of total study subjects (n = 100)

Variables	*n* (%)
Age	
1–10	31 (31%)
11–20	43 (43%)
21–30	14 (14%)
31–40	9 (9%)
41–50	2 (2%)
51–60	1 (1%)
Sex	
Male	59 (59%)
Female	41 (41%)
Religion	
Hindu	50 (50%)
Muslim	46 (46%)
Christian	4 (4%)
Domicile	
Rural	52 (52%)
Semiurban	19 (19%)
Urban	29 (29%)
Type of family	
Extended	5 (5%)
Joint	49 (49%)
Nuclear	46 (46%)

is not statistically significant (p value is 0.5442). On religious perspective, 57.14% and 52.94% of the subjects with mild and severe IDs, respectively, are Hindus, whereas 55% of the subjects with moderate ID are Muslims. It was found that most of the subjects from all the four categories are hailing from rural background (mild, 50%; moderate, 52.5%; severe, 52.94%; and profound, 100%); no statistically significant relationship could be found between the subject's domicile and the severity of ID; p value obtained here is 0.922. We also found that most of the subjects with mild retardation are from joint families (52.38%), whereas most of the subjects with moderate (52.5%) and severe (52.94%) disability are from nuclear family. The only subject with profound disability belongs to an extended family (p value = 0.396). When we looked for educational qualification of subjects, we found that most of the subjects with mild disability have primary education (47.62%), whereas most of the subjects with moderate (65%), severe (76.47%), and profound (only 1) disability are illiterate. We found a statistically significant relationship (p value = 0.0386, <0.05) between literacy of subject and severity of ID. We found that fathers of most of the subjects with mild (40.48%) and severe (52.94%) disability has primary education and fathers of most of the subjects with moderate disability are illiterate (32.5%), whereas mothers of most of the subjects with mild (64.29%), moderate (45%), and severe (35.29%)

Table 2: Distribution of the sociodemographic variables of total study subjects (n = 100)

Socioeconomic status	
Variable	***n* (%)**
Lower	27 (27%)
Lower middle	49 (49%)
Middle	18 (18%)
Upper middle	6 (6%)
Upper	0
Education of subject	
Illiterate	59 (59%)
Primary	33 (33%)
Secondary	8 (8%)
Higher secondary	0
Graduate & above	0
Education of father	
Illiterate	30 (30%)
Primary	38 (38%)
Secondary	19 (19%)
Hs	5 (5%)
Graduate &above	8 (8%)
Education of mother	
Illiterate	52 (52%)
Secondary	10 (10%)
Graduate &above	1 (1%)
Hs	7 (7%)
Occupation of parents	
Business	19 (19%)
Professional	3 (3%)
Retired	4 (4%)
Service	7 (7%)
Skilled worker	16 (16%)
Unemployed	5 (5%)
Unskilled worker	46 (46%)

ID are illiterate. In our study, we could not find any statistically significant relationship between paternal/maternal education and severity of ID. When we investigated the occupation of the parents of the subjects, we found that most of the parents of subjects of all the four categories of IDs, that is, mild (52.3%), moderate (37.5%), severe (47%) and profound (100%) are unskilled workers. Most of the subjects with mild (50%), moderate (47.5%) and severe (52.94%) ID belong to lower middle class, followed by lower class, and the only patient with profound ID belongs to lower socioeconomic strata of the society (Figure 2). However, we did not find any statistically significant relationship (p value = 0.539) between ID severity and socioeconomic status of the subject.

Table 3: Distribution of the types of intellectual disabilities according to severity among total study subjects along with intelligence quotient (I.Q.) distribution

Type of intellectual disability	No. of subjects	Percentage	Mean I.Q.
Mild ID	42	42%	60.69
Moderate ID	40	40%	42.92
Severe ID	17	17%	30.00
Profound ID	01	01%	19.00
Total	100	100%	47.95
Mean I.Q.	47.950		
Median I.Q.	47.000		
Std. Deviation	13.0061		
Minimum I.Q.	19.0		
Maximum I.Q.	70.0		

Table 4: Distribution of the sociodemographic variables according to types of ID

Variables	Mild	Moderate	Severe	Profound
Age				
1–10	10 (23.8%)	16 (40%)	5 (29.4%)	0
11–20	19 (45.2%)	16 (40%)	8 (47.06%)	0
21–30	7 (16.6%)	5 (12.5%)	2 (11.7%)	0
31–40	4 (9.52%)	3 (7.5%)	1 (5.88%)	1 (100%)
41–50	1 (2.38%)	0	1 (5.88%)	0
51–60	1 (2.38%)	0	0	0
Sex				
Female	15 (35.71%)	19 (47.5%)	7 (41.18%)	0
Male	27 (64.29%)	21 (52.5%)	10 (58.82%)	1 (100%)
Religion				
Christian	0	2 (5%)	2 (11.76%)	0
Hindu	24 (57.14%)	16 (40%)	9 (52.94%)	1 (100%)
Muslim	18 (42.86%)	22 (55%)	6 (35.29%)	0
Domicile				
Rural	21 (50%)	21 (52.5%)	9 (52.94%)	1 (100%)
Semiurban	9 (21.43%)	6 (15%)	4 (23.53%)	0
Urban	12 (28.57%)	13 (32.5%)	4 (23.53%)	0
Family type				
Extended	4 (9.52%)	0	0	1 (100%)
Joint	22 (52.38%)	19 (47.5%)	8 (47.06%)	0
Nuclear	16 (38.10%)	21 (52.5%)	9 (52.94%)	0

Discussion

Our study is a hospital-based, cross-sectional study on serially taken 100 subjects with ID who fulfilled the *DSM-V* criteria for "Intellectual Disability" as well as the other inclusion and exclusion criteria mentioned earlier. In this study, we found that majority of the patients with ID (43%) belongs to the age group of 11–20 years. The minimum age of subjects in our study is 4 years and the maximum age 57 years. The mean age is 16.7 ± 10.73 years. A study conducted in India reported similar findings,[13] that (61.9%) of subjects with ID were below 18 years while (38.1%) were above 18 years. However, some studies[14,15] reported higher rate of detection of MR at much younger age. In our study, we have taken the minimum age of the study subjects as 4 years, as complete evaluation of the severity of ID is very difficult in children aged

Table 5: Distribution of the sociodemographic variables according to types of ID

Variables	Mild	Moderate	severe	profound
Education of subject				
Illiterate	19 (45.24%)	26 (65%)	13 (76.47%)	1 (100%)
Primary	20 (47.62%)	10 (25%)	3 (17.65%)	0
Secondary	3 (7.14%)	4 (10%)	1 (5.88%)	0
Higher secondary	0	0	0	0
Graduate & above	0	0	0	0
Education of father				
Illiterate	14 (33.33%)	13 (32.5%)	2 (11.76%)	1 (100%)
Primary	17 (40.48%)	12 (30%)	9 (52.94%)	0
Secondary	7 (16.67%)	8 (20%)	4 (23.53%)	0
Higher secondary	0	5 (12.5%)	0	0
Graduate & above	4 (9.52%)	2 (5%)	2 (11.76%)	0
Education of mother				
Illiterate	27 (64.29%)	18 (45%)	6 (35.29%)	1 (100%)
Primary	8 (19.05%)	16 (40%)	6 (35.29%)	0
Secondary	4 (9.52%)	3 (7.5%)	3 (17.65%)	0
Higher secondary	3 (7.14%)	3 (7.5%)	1 (5.88%)	0
Graduate & above	0	0	1 (5.88%)	0
Occupation of parent				
Business	7 (16.67%)	10 (25%)	2 (11.76%)	0
Professional	1 (2.38%)	2 (5%)	0	0
Retired	1 (2.38%)	1 (2.5%)	2 (11.76%)	0
Service	4 (9.52%)	2 (5%)	1 (5.88%)	0
Skilled worker	6 (14.29%)	7 (17.5%)	3 (17.65%)	0
Unemployed	1 (2.38%)	3 (7.5%)	1 (5.88%)	0
Unskilled worker	22 (52.38%)	15 (37.5%)	8 (47.06%)	1 (100%)
Socioeconomic status				
Lower	11 (26.19%)	11 (27.5%)	4 (23.53%)	1 (100%)
Lower middle	21 (50%)	19 (47.5%)	9 (52.94%)	0
Middle	8 (19.05%)	8 (20%)	2 (11.76%)	0
Upper middle	2 (4.76%)	2 (5%)	2 (11.76%)	0
Upper	0	0	0	0

below that. The average age of the subjects in our study is 16.7 ± 10.73 years, which is much higher when compared to other similar studies. This may be because of the fact that due to low parental education and low awareness among them about presence of treatment options for preventable causes of ID , most of the subjects are brought late in mental health-care system in our society.We found that majority of the subjects were male (59%), whereas females were 41%. Study by Durkin et al. (2000)[16] in Bangladesh and in Karachi, Pakistan,[17] reported similar findings. Murphy et al. (1995)[18] commented that "regardless of I.Q. level or the presence of neurological conditions, boys are more likely than girls to have mental retardation". Bhagya and Ramakrishna (2013)[19] conducted a study in Mangalore, India, among 324 children with mental retardation (MR) and found the prevalence of MR was higher among males than in females ($p < 0.001$). This consistent finding may be due to social stigma, for which parents of female child are less likely to come forward to mainstream health-care system. We found that the distribution of the subjects is almost equal across the two religious groups, Hindus (50%) and Muslims (46%). Reports by some studies,[5,20,21] however, shows a Hindu predominance among the Indian ID population. This finding probably shows the religious distribution of the area. We have found that high

Table 6: Association between various sociodemographic variables according to severity of ID

Variable	Mild ID	Moderate ID	Severe/profound ID	X^2, df	*p* Value
Age					
≤10	10	16	5	2.617, 2	0.2702
>10	32	24	13		
Sex					
Male	27	21	11	1.217, 2	0.5442
Female	15	19	7		
Domicile					
Rural	21	21	10	0.1625, 2	0.9220
Urban/semiurban	21	19	8		
Family type					
Nuclear	16	21	9	1.853, 2	0.3960
Joint/extended	26	19	9		
Education of subject					
Illiterate	19	26	14	6.507, 2	0.0386
Literate	23	14	4		
Education of father					
Illiterate	14	13	3	1.865, 2	0.3936
Literate	28	27	15		
Education of mother					
Illiterate	27	18	7	4.565, 2	0.1020
Literate	15	22	11		
Socioeconomic status					
Lower + lower middle	32	30	14	0.0539, 2	0.9734
Middle + upper-middle + upper	10	10	4		

Chi-square (χ^2) was applied. ID = Intellectual disability, df = degree of freedom.

percentage of illiteracy (59%) prevails among the intellectually disabled population and none of them are able to obtain education beyond secondary level. Similar findings were reported by numerous studies, for example, a study by Durkin et al.[16] in Bangladesh found that 35% of the study subjects has no schooling at all. Malhotra and Chaturvedi (1984)[22] reported that 40% of the study subjects were illiterate, 50% studied up to primary class, and 10% up to middle school. Our study revealed that ID is much common in the lower (27%) or lower middle (49%) socioeconomic strata in comparison to the middle (18%) or upper classes (6%). Subjects from lower strata of the society are less likely to get access to adequate health-care facilities leading to poor antenatal and perinatal care that increases the risk of ID. Poverty-stricken homes are more exposed to infectious agents and malnourishment increasing the risk of ID. Similar findings are reported by numerous other studies[14,23,24] in which it is commented that parents with low level of educational and economic background tend to have more children with such disability. Stein et al. (1987)[25] studied subjects from eight less developed countries and reported that when compared with controls, the families of all children with MR were found to be from much lower socioeconomic strata of the society than the families of the controls. We found that majority of the subjects are from joint families (59%) and with rural background (52%). Although some studies[26,27] corroborate with our data, many studies concluded that ID is predominant in nuclear families[28,29] and in those with urban background.[16] Our finding actually reflects the population pattern of the catchment area of the study, which is mostly rural and agriculture-based joint families being culturally predominant. An Indian study by Gupta[14](p.271) also observed this and commented that the subjects may be more from rural population because of the possibility that they may feel a greater need to cooperate with the *hope of recoverability*; on the other hand, the urban population are less willing to disclose of their *crippled children for fear of identification*. In our study, we found that parents of most of the subjects have an occupation which is low paying, stressful, and involves manual labor such as that of an unskilled worker (46%). Other studies also have shown that most of the parents are either unemployed or are having a low-paying job.[28,30] Gopalan et al. (2014)[26] in India reported that 65.2% of the fathers were manual labors, 6.8% were unemployed, and 16.2% had other lower-level jobs. When we looked for parental education, we found that educational level is significantly less in parents of our subjects with maternal illiteracy being significantly high (52%). Similar findings are reported by several other studies such as the one

conducted in Bangladesh[16] showed that 44.5% of the fathers and 63.3% of the mothers were illiterates. Other studies by Leonard and Wen (2002),[31] and Murphy et al. (1995)[18] found that low maternal education is associated with high prevalence of MR. We also studied the distribution of the types of ID among 100 subjects and found 42% of the subjects are having mild ID, 40% moderate, 17% has severe, and only 1% has profound ID. The study conducted by Bhatia[5] in and around Delhi, India, reported the distribution of the types of ID in their study subjects as 43.4%, 34.2%, 18.4%, and 2.6% for mild, moderate, severe and profound ID, respectively, while Bhagya and Ramakrishna[19] in another study, conducted at Mangalore, India, reported that out of the observed 324 children with MR, 48.15% showed mild MR followed by moderate (29%), severe (14.2%), and profound (8.6%) MR. A Chinese cross-sectional epidemiological study[32] reported the percentages of mild, moderate, severe, and profound MR as 60.6%, 22.7%, 9.6%, and 7.1%, respectively. We found that age has no significant relationship with the type of ID, and mild and severe forms of ID are more commonly identified in the second decade of life, whereas moderate ID is more prevalent in the first decade. Regardless of the type of ID, males are more vulnerable to ID or female subjects with ID presents less in the health-care system. We also independently found that all types of ID are predominant in rural environment than in the urban, indicating that rural population of this area is currently in much need of proper screening procedures in the health-care system for early detection as well as effective interventions that has to be delivered at early stages of life to avoid the preventable causes of ID. We found that moderate and severe types of ID are more prevalent in nuclear families, whereas mild ID is found more in joint families. This finding shows the role of family support in prevention of progression of severity of ID. Joint families are more likely to provide more caregiver support than a nuclear family to the pregnant mother or the growing child. We found that subjects with mild form of ID can attain some educational qualifications, but in subjects with other three types of ID of higher severity, illiteracy usually prevails. The relationship between severity of ID and education of subject is statistically significant (p value = 0.039). Across the types of IDs we found no significant statistical correlation between paternal or maternal education; however, across all types of IDs maternal education is consistently low. Across all four categories intellectual disability prevails most in subjects among the lower-middle class of the society with parents occupied with high stress and low-income job. Although we could not find any statistical significance, the difference of prevalence of ID, regardless of their severity, is significant between the lower classes and upper classes of our society.

Conclusion

This study is one of the very few studies conducted among the intellectually disabled population in northeastern India where the new *DSM-V* classification system with the new criteria has been used to assess the ID. However, there were some limitations of our study. The present study was a hospital-based cross-sectional study with limited study subjects, so it may not reflect the actual scenario of the sociodemographic variables of the community. We have seen that the few factors that have repeatedly come up in this study are late presentation of subjects with ID to the medical facilities, low literacy rates among the subjects as well as their parents, low-paying high-laboring jobs of parents, and the social burden of being from a lower socioeconomic stratum. Thus, in order to decrease the incidence of ID in this country, there is urgent need to promote literacy among parents and subjects, deliver better perinatal care, lower the social burden on the low socioeconomic strata of our society, and raise awareness about ID among the general population.

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