

# SOCIO-DEMOGRAPHIC BACKGROUND OF PARENTS WITH CHILDREN WITH MENTAL RETARDATION

*Dr.(Mrs.) Harish*

## **ABSTRACT**

*One of the most prevalent health problems in children is mental retardation, but if the underlying cause is identified and treated as soon as possible, it may be prevented. Within the 2400 km long goitre belt that stretches over the southern Himalayan mountains is District Kangra. The study's participants are going to be kids between the ages of 1 and 10, and the purpose is to learn more about how common mental disabilities are within that age range. Who's Involved and How It Works, most notably: Two distinct parts of rural Kangra were the subject of a cross-sectional study. To evaluate the health of children in the Kangra district, a random sample was taken from five panchayats (local government units). The sampling strategy used was a cluster sample comprised of thirty clusters. In the first round of testing, 2420 children participated; 95 of them passed. The second part of the study indicated a frequency of 2.15% for mental disability among a sample of 52 children. Using the Uday Parekh scale, which measures socioeconomic status, we found that 28.3 percent of these children were middle-class and that 69.5 percent were lower-middle class. Kangra, a district in the Indian state of Himachal Pradesh, has a much greater prevalence of intellectual disability than the rest of the nation. One possible explanation is that around 70% of births in Himachal Pradesh take place in medical facilities. This may mean that newborns with congenital disorders and those who suffer stress during the neonatal period have a better chance of survival.*

**KEYWORDS:** *Goitre, mental retardation, rural, socio-demography*

## **INTRODUCTION**

The “American Association for Mental Health (AAMH)” developed criteria that define “significantly sub-average intellectual functioning existing concurrently with related limitations in two or more of the following applicable adaptive skill areas: communication, social skills, community use, self-direction, health and safety, functional academics, leisure, and work.” These areas include communication, self-care, home living, social skills, community use, and self-direction. It is now abundantly evident that these constraints apply “before the age of 18.” Mental impairment is crucial factors that contributes to sickness in younger persons. Research on the frequency of cognitive disorders in “children and the risk factors linked with them is only conducted in economies” which is strong enough to support such endeavors. Because so many countries keep databases and records of their various services, it is considerably simpler to determine whether or not an event really took place in such nations. In certain regions of India and Pakistan, the prevalence of significant mental illnesses is between 12 and 24 persons for every 1000 inhabitants. The conclusions stem from the preliminary inquiry that was conducted. It seems that the percentage of children with impairments living in wealthy countries is growing at an alarming rate. This informs that “less developed nations may have a higher prevalence” of major mental disabilities; however, this hypothesis needs to be tested. It would seem that the incidence of childhood

impairments has increased in rich countries as a direct response to the rise in the overall rate of newborn survival in some of those countries. This is “because a number of risk factors and causes are still very common in less developed countries” even though they are less common in wealthier nations.

Parents of “children with intellectual disabilities may experience additional pressure because they are more receptive” to the views of the public and their peers. This is a “result of the parents' increased awareness” of peer opinions. According to Boss (1988), this is exactly what happened during the time in question. Researchers investigated how different types of families and levels of income were affected by the stress levels of their parents. It may be challenging to bring up a kid who has an intellectual handicap, despite factors such as the age of the parents, whether or not they are married, and how much education each parent has. Researchers Oh, Rubin, and Mouw (1994) found that parents may be more vulnerable to the adverse consequences of stress.

Within the goitre belt that spans the southern Himalayan mountain range and extends for a total of 2400 kilometers, the Kangra District may be found. When I searched PubMed for studies on the prevalence of mental disability in the area, I came up empty. Iodine insufficiency is a “common cause of mental disability in children”, although it may be prevented with proper nutrition. When organizing programs and services for the families and kids of mentally retarded children, estimates of the disease's prevalence are crucial. The only approach “that can be used to discover the causes and risk factors of childhood impairments as well as the needs of children and families” who need special help is epidemiological research that is based on populations. This kind of study also help to analyze the requirements of children who have special needs. Patients who come from a variety of cultural backgrounds need cultural awareness in all aspect of the patient interview, including the conceptualization of the case, diagnosis, and treatment. As a result, it is essential to conduct investigations that include sizable portion of different people. In order to provide an accurate diagnosis to the patient and devise a treatment strategy that they are willing” to follow, the attending physician is required to handle a number of challenges that arise during the examination.

## **MATERIALS AND METHODS**

The Kangra district of Himachal Pradesh extends across an area with the following coordinate ranges: 31°21' to 32°59' north and 75°47' to 77°45' east. The “structural support is provided by the mountainsides in the southern part” of the Himalayas. The whole of the land that falls within the purview of the Kangra district totals 5,739 acres.

The solitary block in rural Kangra that serves as the focal point of both halves of this investigation. This area is home to something in the neighborhood of 100,000 individuals. Each of the five panchayats has around 12,000 residents who were chosen at random from the general population. The initial step of the research was going around to different houses in order to collect data. Research participation by minors is strictly prohibited unless they have the approval of either their parents or a legal guardian. Everyone between “the ages of one and 10” was given the test that consisted of ten questions. To further understand the extent to which individuals have cognitive impairment, researchers have given the 10-item test to a variety of groups.

Ten questions have a high sensitivity when used as a global screen, ranging from 84% all the way up to 100% of the time. It results, that we are in a position to recognize major difficulties, such as motor, cognitive, or epileptic diseases. In total there are ten questions, including five questions pertaining to the development of the mind, vision, and hearing, two questions pertaining to physical limitations, and one question pertaining to convulsions. The community's youngest children are exhibiting the most overt symptoms of the iodine feeding's impacts.

## REVIEW OF LITERATURE

Researchers examined the levels of stress experienced by mothers as they cared for their ill children. The focus of this paper is to evaluate the levels of stress that are experienced by female caregivers of children who have a range of impairments including their socioeconomic background.

The objective of this comparative cross-sectional study was to ascertain “the levels of stress experienced by parents of children with and without” mental disability. The “stress levels indicated by parents of children with mental problems were significantly higher” than those reported by parents of children with usual developmental levels.

It's common for parents of children diagnosed with “Down syndrome to report higher overall levels of stress” in their lives. The child's attention, demands, or rejection are not the only things that may produce stress for the parents; the parents' own feelings of inadequacy, hopelessness, and health issues, as well as their efforts to play only particular roles, can also cause stress. This is a remarkable contrast when compared to “the experiences of parents whose children have normal” development. It was shown that caregiving obligations are a substantial cause of stress for women, but the demographic status of their children (such as whether they have down syndrome or are developing normally) was discovered to be a more important source of stress for dads. Mothers “who stated they had more children at home also stated they had more obstacles” in terms of their health, their capacity to work, and their husbands' willingness to assist. Fathers who took a more active role in their kids' upbringing reported having fewer issues with competence and connection. According to research, there is a “positive correlation between the stress” that occurs in parent-child relationships and the stress that occurs in the parent.

## QUESTIONNAIRE CREATION

Together with two public health professionals, a post-graduate student researcher with multilingual skills, and a doctor from Himachal Pradesh, they created a battery of tests that can be administered in the local language and most closely resemble the English version of a ten-question screen. In order to do this, ten screening questions were developed.

The specialists convened and discussed the several TSQ options available for use on tests administered in languages other than English. We solicited feedback from our panel of experts at every step of the questionnaire's creation, and we only included a question if it was unanimously approved.

## PRE-PILOT

Focus of the pilot project was to gather information to assess the questionnaire prepared. We convened a focus group consisting of 25 parents whose children were in age-group of 1 to 10. The discussion of the questions and identification of any shortcomings in the TSQ localization was the group's goal. We conducted our first survey test with twenty-five participants, and we made numerous modifications based on their feedback. The updated version complies with the committee's unanimous decision once again.

The results of this procedure were a series of survey questions that respondents found to be understandable, relevant, and pleasant. It was started by testing the layout designs.

## PILOT PHASE

Following the necessary adjustments to the assessment instruments, a random selection of fifty participants was done from the Shahpur census database to take part in pilot. Each “participant was a guardian of a kid between the ages of one and ten”. As mentioned “random selection method” was used to choose test subjects.

Beginning was the lottery ticket sellers at Shahpur city bus stop, and the departure point was also selected at random. We began on the left side of the alley and flipped a coin to decide the order in which house has to be visited. There were five distinct lanes used for the operation, and fifty samples were collected.

A child was deemed to have a disability if any of the 10 questions they answered suggested that they might be handicapped. Those who “tested positive after the first screening” were sent to a physician for further assessment.

## CLINICAL EVALUATION

Despite not knowing the outcome of the initial testing, a pediatrician performed an in-person assessment. The patient was given the Stanford-Binet nonverbal IQ test in 1985, and the findings of that exam were what led to the diagnosis of mental retardation. A comprehensive evaluation of the kid's conduct, linguistic ability, motor skills, and compliance with directions, as well as a review of the child's developmental history, led to the confirmation of the diagnosis of mental retardation in the youngster. In order for a kid to be labeled as having mental retardation, their cognitive capacity must be much lower than average. In addition, the child must struggle significantly with self-care activities, socializing, engaging with classmates, and exhibiting adaptive behavior.

## OBJECTIVES

The following is a list of some of the crucial “research questions” that this topic brings up:

1. Consider the characteristics of the people who live in homes with a member who has mental impairment.
2. Investigate the ways in which a variety of demographic characteristics are linked to stress.
3. This study aims to give a “quantitative assessment of the stress experienced by parents of children” with intellectual disability.

## RESULTS

The age range of parents who were between 46 and 55 years old made up the biggest group (28 percent of the total). Women make approximately 55% of the population of parents. The “study was conducted in Malabar”, which is a region that is mostly Muslim, “the majority of the parents” who answered the questions identified themselves as Muslims. Five hundred sixty-six percent of the respondents recognized OBCs in line with their own communities. It is estimated that just 27% of parents have earned a high school diploma (sometimes referred to as an STD). About half of all parents are forced to find additional means of income generation in order to afford putting food on the table for their families. A average monthly income in the United States falls anywhere between \$10,000 and \$20,000 for 25% of all families. It is estimated that around half of all homes fall into this category. Sixty-six percent of all families consist of only the biological parents and any biological children they may have. To be more specific, fifty-two percent of parents call rural areas home. This constitutes a very big majority. According to the data table that presents the percentages of predicted high, medium, and low stress levels, that over half of caregivers, or 49%, were at risk of feeling a medium degree of stress. Stress was not shown to have a statistically significant link with demographic variables such as age, religion, community, education, family size, or housing among the parents of children who had cognitive issues. This was the finding “from a study that looked at parents” of children who had cognitive impairments.

This region has a much higher prevalence of mental retardation than the norm throughout the country, coming in at 2.15 percent. As given by the modified Uday Parekh scale, 686 (28.3%) of the children assessed in the first

phase came from middle class parents, 1690 (69%) came “from families of the lower middle class, and 64 (2.6%) came from households belonged to the lower class”. The Uday Parekh scale was used for the purpose of conducting a survey with the children's families to obtain these percentages. It was determined that 41 children, or 2.4% of the total sample size of 1670 children, had some kind of intellectual disability. Students belonging to the “middle class families were more likely to struggle” academically. In comparison, just 8 out of 686 “children from middle class families (1.16 percent) were diagnosed with mental disability”, whilst only 3 out of 63 children from the lowest socioeconomic group (4.7 percent) obtained such a diagnosis. Women in their 20s have a lower risk of being impacted by the condition as compared to young males. Approximately 59.6% of the “children diagnosed with mental health conditions” were boys (31/52). Twenty-seven percent (24/31) of the women and five percent (5/31) of the men in the “sample were classified as belonging” to the middle class.

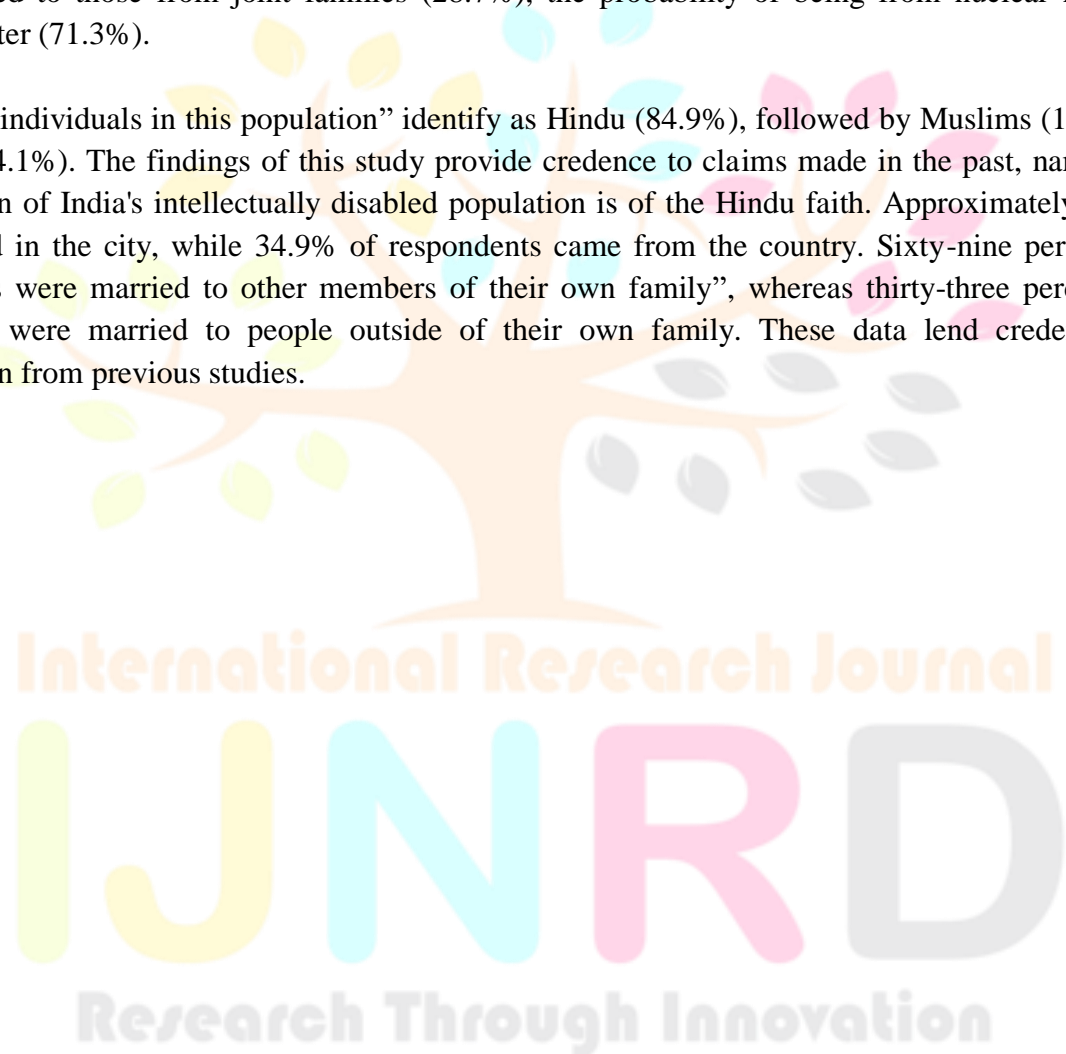
**Table 1: Socio-demographic variables of the Subjects**

Variables		Number	Percentage
Age	9 - 10	86	25.5
	11 - 12	97	28.6
	13 - 14	103	30.5
	15 - 16	52	15.4
Gender	Boys	227	67.2
	Girls	111	32.8
Birth Order	First	147	43.5
	Second	158	46.7
	Third	33	9.8
Type of Family	Nuclear	241	71.3
	Joint	97	28.7
Religion	Hindu	287	84.9
	Christian	14	4.1
	Muslim	37	10.9
Locality	Rural	118	34.9
	Urban	220	65.1
Type of Marriage	Consanguineous	226	66.9
	Non-Consanguineous	112	33.1

Table 1 presents the “socioeconomic data collected from the participants of the study. The ages” of the subjects were, on average, 12.52.45 years old. The “ages of the participants ranged” anywhere from 9 to 16 years old. Teenagers made up 35 percent of the total participants in this study. There were 67 percent male patients and 32 percent female patients among the total number of patients. The conclusion of this study are in line with those obtained by Durkin et al., who said that "boys are more likely than girls to have mental retardation, regardless of I.Q. level or the presence of neurological conditions." The results of this investigation agree with those of Durkin et al.

The majority of the people who took part in the study were born in the second quartile, followed by those born in the first and third quartiles. This conclusion is consistent with earlier “research's conclusions that people with intellectual disabilities” had a greater likelihood of coming from nuclear households and of residing in urban regions. Compared to those from joint families (28.7%), the probability of being from nuclear homes was significantly greater (71.3%).

The “majority of individuals in this population” identify as Hindu (84.9%), followed by Muslims (10.9%), and then Christians (4.1%). The findings of this study provide credence to claims made in the past, namely that a significant portion of India's intellectually disabled population is of the Hindu faith. Approximately 65.1% of respondents lived in the city, while 34.9% of respondents came from the country. Sixty-nine percent of the subject's “parents were married to other members of their own family”, whereas thirty-three percent of the subject's parents were married to people outside of their own family. These data lend credence to the conclusions drawn from previous studies.



**Table 2: Education and Occupational Status of the Subjects Family (n = 338)**

Variables		Number	Percentage
Fraternal Education	Illiterate	26	7.7
	Primary	104	30.7
	Middle	123	36.4
	Secondary	27	8.0
	Graduate & above	58	17.2
Maternal Education	Illiterate	36	22.5
	Primary	114	33.7
	Middle	75	22.2
	Secondary	37	10.9
	Graduate & above	76	10.7
Fraternal Occupation	Working	324	95.9
	Not Working	14	4.1
Maternal Occupation	Working	76	22.5
	Not Working	262	77.5
Monthly Income	Low (<12k)	62	18.0
	Moderate (12-25k)	209	62.0
	High (>25k)	67	20.0

The educational and professional histories of the subjects are presented in Table (2). According to the findings, the fathers of the people who took part in the research had finished middle school at a rate of 36.4%, elementary school at a rate of 30.8%, college at a rate of 17.2%, and secondary school at a rate of 8%. 7.7 percent were absolutely incapable of reading or writing. Regarding the mothers' educational background, 22.2% had completed middle school and 33.7% had completed elementary school. The percentage of mothers who had earned a post-secondary degree or above was just 10.9 or 10.7 percent, depending on whose figure you choose. A total of twenty-two percent of mothers lacked any level of literacy. Research has “indicated that mothers are much more likely than fathers” to be illiterate.

**Table 3: Distribution of Age According to the Type of Intellectual Disability (n=338)**

Age	Type of Intellectual Disability						X2, df	p-value
	Mild		Moderate		Severe			
	No	%	No	%	No	%		
9 - 10 (n=86)	62	29.5	24	23.1	0	0.0	21.246,6	.002*
11 - 12 (n=97)	58	27.6	30	28.8	9	37.5		
13 -14 (n=103)	63	30.0	35	33.7	5	20.8		
15 – 16 (n=52)	27	12.9	15	14.4	10	41.7		
<b>Total</b>	<b>210</b>	<b>100</b>	<b>104</b>	<b>100</b>	<b>24</b>	<b>100</b>		

In Table 3, the age of disabled people is categorized according to the kind of their disability. In the ages of 9 and 10, (30% of the participants) were classified as having “a mild handicap, while the majority of those with a moderate disability” consists of 35%, and those with a severe disability (41%), were in the age-group of 15 and 16. There was not a single incidence that qualified as "severe" among youngsters aged 9 to 10. Results “also show that there is a difference” in age that may be considered statistically significant between the various types of intellectual disability. It is probable that the only children that fall into the category of having a moderate handicap are the ones who are enrolled in schools, which would explain the abnormally high percentage of mild impairment among the study's subjects.

**Table 4: Distribution of Gender Consisting of Intellectual Disability**

Gender	Type of Intellectual Disability						X2, df	p-value
	Mild		Moderate		Severe			
	No	%	No	%	No	%		
Boys	153	72.9	69	66.3	5	20.8	26.475,2	.000
Girls	57	27.1	35	33.7	19	79.2		
Total	210	100	104	100	24	100		



The frequency of each type of impairment, as reported by the people and broken down by gender, is presented in table (4). While most persons “with severe disabilities were female”, most people with moderate and mild impairments were men. The majority of people with minor impairments were male. There is a statistically significant difference between the sexes in terms of intellectual disability (P 0.05). This gap exists between men and women. One “possibility that could help explain the anomaly is that more boys than girls” enroll in special education programs.

### **PERCENTAGES DENOTED BY BRACKETS**

belonged to the lowest social class, while three persons out of thirty-one, or 6.45% of the total population, were considered to be very poor. Approximately 40.3% of children with mental impairment were identified as girls (21/52). Those in the upper middle class made up 14% of the whole population (3/21), those in the lower middle class made up 89.9% of the total population (17/21), and the homeless made up 5% of the total population (1/21).

On the Uday Parekh scale, the degree of paternal education stands out as crucial variable. 46.1% of all children had fathers with a high school diploma or above, but 28.8% of the mentally retarded population had fathers with just a middle school degree or below.

### **DISCUSSION**

Certain countries have higher rates of mental retardation than others; for example, whereas Atlanta, Georgia in the “United States” has a frequency of 0.33%, the United Kingdom has a higher rate of 0.34%, Australia a higher rate of 0.3%, Canada a higher rate of 0.3%, and China a higher rate of 0.72%. After analysis of eight developing nations, it was concluded that the prevalence of mental retardation ranged from 0.9% in the Philippines to 15.6% in Bangladesh.

In India, the “proportion of the population afflicted by mental retardation” varies from 2.3% in Karnataka to 3% in Mangalore and 0.72% in Jammu & Kashmir. The study findings indicate a prevalence rate of 2.15 percent, which is greater than the US median prevalence rate. Himachal Pradesh's outstanding primary health care system gives its children a better than average probability of living to maturity. Seventy percent of births in the state of Himachal Pradesh occurred in hospitals between 2011 and 2012. This “implies that newborns with congenital abnormalities or those who experienced birth stress and went on to develop mental diseases were more likely” to survive. Maximum of the young participants in the research were from lower-class and middle-class backgrounds. The paternal circumstances—his income, employment, and educational attainment—probably have a role in whether or not their kid receives a mental retardation or depression diagnosis. The majority of parents have some college education. This is “probably the case because better educated parents are probably better able to recognize” the early signs of mental illness and developmental difficulties in their kids.

According to estimates, the prevalence of mental illness is 0.1% in cases of moderate impairment and 0.5% in cases of severe impairment. There was a statistically significant and robust correlation between the frequency of moderate to severe mental disability and low socioeconomic position. A Business Known as Strome & Co. People from “lower socioeconomic origins were more likely to live in families with someone who had a moderate to severe mental disability”, according to a cross-sectional research conducted in Oslo, Norway. In response, they assert that there is a greater likelihood of serious impairment in infants born to those with better socioeconomic status. When comparing “children of mothers in the most disadvantaged 10% of the community to those of mothers” in the least disadvantaged 10%, it was discovered that the incidence of mild and moderate id was five times higher in the former group.

This is a classic example of the connection between socioeconomic level and early onset mental impairment. Three of the most prevalent causes of mental retardation include infections acquired during pregnancy, infections contracted after delivery, and inadequate testing for chromosomal and congenital illnesses. These traits disproportionately afflict “lower socioeconomic groups, maybe because they have less access” to healthcare. When attempting to determine the actual frequency of mental retardation, it is important to consider the prevalence of other common pediatric disorders. Although “they may have similar effects”, motor or sensory impairments do not cause cognitive impairment. A young kid may grow up to “feel anxiety or depression if they are socially rejected by their classmates or worried about how other people” may think about their strange behaviour. Children who experience bullying and isolation may be more likely to develop these illnesses. Widespread adoption of well-managed, inclusive educational initiatives that strive for maximum social integration might perhaps mitigate such reactions. If families from lower-middle class backgrounds had “access to the resources required for education and treatment, the prevalence” of mental illness in children might be decreased.

## CONCLUSION

The study's conclusions indicate that families “with at least one person suffering” from a mental illness endure substantial levels of ongoing stress. There are a variety of economic and societal issues that add to the strain placed on families. The degree of stress a child experiences is “correlated with several factors”, such as age, gender, the severity of their mental illness, the educational and professional backgrounds of their parents, the family's income, and the number of siblings they have. The study's findings highlight the need of giving parents additional chances to take part in stress-reduction programs. It is well acknowledged that when a person's mental handicap lessens in severity, their social quotient will rise from severe to moderate. There is not much of a gap between the generations in terms of their respective social standings. When working with patients who come from low-income homes, clinical psychologists might utilize the Vineland Social Maturity Scale as a simple instrument to evaluate the intellect and social maturity of their patients, including adults and children.

## REFERENCES

1. Kiely M., “The prevalence of mental retardation”. *Epidemiol Rev* 1987;9:194-218.
2. Chen J, Simeonsson RJ. Prevention of childhood disability in the People's Republic of China. *Child care Health Dev* 1993;19:71-88.
3. Islam S, Durkin MS, Zaman SS. Socioeconomic status and the prevalence of mental retardation in Bangladesh. *Ment Retard* 1993;31:412-7.
4. Durkin MS, Hasan ZM, Hasan KZ. The ten questions screen for childhood disabilities: It's uses and limitations in Pakistan WHO/UNICEF/ICCIDD. Indicators for assessing iodine deficiency disorders and their control through salt iodization. Geneva: WHO/NUT/94.6;1994.
5. Durkin MS, Hasan ZM, Hasan KZ. Prevalence and correlates of mental retardation among children in Karachi, Pakistan. "American journal of epidemiology." *Am J Epidemiol* 1998;147:281-8.
6. Bhaskin TK, Brocksen S, Avchen RN, Van Naarden Braun K. Prevalence of four developmental disabilities among children aged 8 years--Metropolitan Atlanta Developmental Disabilities Surveillance Programmes, 1996 and 2000. *MMWR Surveill Summ* 2006;55:1-9.
7. Bingham, G. E. (2007). Maternal literacy beliefs and the quality of mother-child book-reading interactions: associations with children's early literacy development. *Early Educ. Dev.* 18, 23–49. doi: 10.1080/10409280701274428

[CrossRef Full Text](#) | [Google Scholar](#)

8. Peckham C, Pearson R. The prevalence and nature of ascertained handicap in the National Child Development Study (1958 cohort). *Public Health* 1976;90:111-21.
9. Bradley EA, Thompson A, Bryson SE. Mental retardation in teenagers: Prevalence data from the Niagara region, Ontario. *Can J Psychiatry* 2002;47:652-9.
10. Leonard H, Petterson B, Bower C, Sanders R. Prevalence of intellectual disability in Western Australia. *Paediatr Perinat Epidemiol* 2003;17:58-67.
11. Kumar SG, Das A, Bhandary PV, Soans SJ, Harsha Kumar HN, Kotian MS. Prevalence and pattern of mental disability using Indian disability evaluation assessment scale in a rural community of Karnataka. *Indian J Psychiatry* 2008;50:21-3.
12. Xie ZH, Bo SY, Zhang XT, Liu M, Zhang ZX, Yang XL, et al. Sampling survey on intellectual disability in 0 approximately 6-year-old children in China. *J Intellect Disabil Res* 2008;52:1029-38.
13. Raina SK, Razdan S, Nanda R. Prevalence of mental retardation among children in RS Pura town of Jammu and Kashmir. *Ann Indian Acad Neurol* 2012;15:23-6.
14. Bhagya B, Ramakrishna A. Prevalence of mental retardation among children in Mangalore. *Nitte Univ J Health Sci* 2013;3:63-6.
15. Blair, C., Raver, C. C., and Berry, D. J. (2014). Two approaches to estimating the effect of parenting on the development of executive function in early childhood. *Dev. Psychol.* 50, 554–565. doi: 10.1037/a0033647

[PubMed Abstract](#) | [CrossRef Full Text](#) | [Google Scholar](#)

16. Vilaseca, R., Rivero, M., Bersabé, R. M., Navarro-Pardo, E., Cantero, M. J., Ferrer, F., et al. (2019). Spanish validation of the PICCOLO (parenting interactions with children: checklist of observations linked to outcomes). *Front. Psychol.* 10:680. doi: 10.3389/fpsyg.2019.00680

[PubMed Abstract](#) | [CrossRef Full Text](#) | [Google Scholar](#)

