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

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## ABSTRACT

*One of the most predominant health problems in children is mental retardation, but if the underlying cause is identified and treated as soon as possible, it may be prevented. Socio-demographic background of parents has a major role in handling mental retardation of children. This issue is very significant for all the nations of the world including India. Present study is done in the goitre belt of southern Himalayan mountains in District Kangra. There has been a very little work done on the socio-demographic background of parents of mentally slow children. Two distinct parts of rural Kangra were the subject of a cross-sectional study. To gauge 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. The study indicated a frequency of 2.15% for mental disability among a sample of 338 children. Using the Uday Parekh scale, which measures socio-economic 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 occurrence 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 new born 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) in 1959 was the first to integrate formally the measurement of intellectual capabilities and adaptive behaviour functioning. According to this mental retardation can be defined as "sub average general intellectual functioning which originates in the developmental period and is associated with impairment in adaptive behaviour". Simply mental obstruction can be defined as a condition of arrested or incomplete development of the mind, which is characterized by impairment of skills revealed during the developmental period, which contribute to the overall level of intelligence, i.e. motor, cognitive, language, and social abilities. It is now abundantly accepted that these constraints apply "before the age of 18"( Kiely M.,1987).

One of the most common disabilities occurring in childhood is mental retardation (Chen J, Simeonsson RJ.,1993) 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 endeavours (Raina SK, Razdan S, Nanda R., 2012). It is considerably simpler to determine whether or not an event really took place in such nations due to availability of such records. In India and Pakistan, preliminary research on severe mental impairment in specific communities has yielded remarkably elevated prevalence estimates, ranging from 12 to 24 per 1000 (Durkin MS, Hasan ZM, Hasan KZ.1998). The possibility of an elevated frequency of severe mental retardation in less developed countries is plausible and needs confirmation because some of the specific causes and risk factors that are now uncommon in developed countries remain highly prevalent in less developed countries, and because child survival is beginning to improve in some countries (a situation that in developed countries appears to have resulted in an increase in the prevalence of childhood disabilities). The etiologies of mental retardation are multiple, and

prevalence can be influenced by social, economic, cultural, racial, ethnic, and other environmental factors including the demographics of age and gender. Various studies have consistently found the occurrence of mental obstruction to be associated with a low socioeconomic status (Durkin MS, Hasan ZM, Hasan KZ 1998). At National level prevalence of disability was 2.2% and it was 2.3% in rural areas and 2.0% in the urban areas according to round NSS 76th.

A portion of the 2400 km long goitre belt that stretches over the southern Himalayan foothills is made up of District Kangra. This district has seen a number of studies on iodine insufficiency and goitre prevalence; however, no research on the prevalence and causes of mental retardation conducted in this district was discovered, despite a thorough search on PubMed. One of the main causes of childhood mental impairment is iodine deficiency. Estimates of the prevalence of mental retardation are crucial for figuring out the education and health care needs of children with this condition. 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. In order to facilitate the design of services for children and families with special needs, population-based epidemiological research on childhood disabilities are required. This approach help to identify the risk factor and causes and needs assessment for special need child and their families. Research spanning demographics must be conducted because cultural sensitivity is crucial to the interview, case development, diagnosis, and treatment of people from many cultural backgrounds. In addition, evaluating these people brings up a number of concerns that medical professionals must address in order to provide a diagnosis and treatment plan that will be accepted by the patient.

## 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 neighbourhood 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. All the children within the age group of 1–10 years were screened using the ten questions screen (Durkin MS, Hasan ZM, Hasan KZ.,1995) . The ten questions screen has been used by the researchers across populations for the assessment of mental retardation.

Ten questions have a high sensitivity when used as a global screen, ranging from 84-100 percent . 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.

## FORMATION OF QUESTIONNARE:

Questionnaire was formulated with the help of post-graduate students of psychology students with knowledge of local language, village level worker and a doctor from the same region in 2018. 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. Several questions were formulated. The questions were tested and included only if it was unanimously approved. To make process easy for survey first a pre-pilot is done in this regard.

## PRE-PILOT:

Focus of the pre-pilot project was to gather information to assess the quality of the questionnaire prepared. The survey was conducted in 2018.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 them while asking them in local language remains the main goal. We conducted our first survey test with twenty-five participants, and we made numerous modifications based on their feedback. The updated version of questions complied were discussed with surveyors and a unanimous decision was taken.

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

## PILOT PHASE:

Following the necessary adjustments to the assessment instruments, an age-stratified (1–2, 3–5, 6-8 and 8–10) random sample of 238 subjects (parents of children 1–10 years of age) was drawn from the Shahpur census database for a pilot study. The subjects were selected by simple random technique. After starting from the central part of Shahpur (bus stand area), one of the lanes was selected randomly by the lottery method using a currency note. Subjects were approached in their homes starting from the left side of the lane (after the toss of a coin in choosing the sides of lane). The process was repeated in similar manner in other lanes till a desired sample size of 50 was achieved.

Using a global interpretation of the ten questions, a child was considered positive for any disability if a response to any one question indicated potential disability. Those testing positive in the first phase were examined further with the help of available Paediatrics there.

Despite not knowing the outcome of the initial testing, a paediatrician performed an in-person assessment. The diagnosis of mental retardation was made after psychological assessment based on nonverbal scales from 1985 revision of the Stanford–Binet intelligence test 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 order for a kid to be labelled as having mental retardation, their cognitive capacity must be much lower than average. In addition, the child must struggle significantly in two or more adaptive skill areas like communication, self-care activities, home living socializing, community use, self-direction, health and safety, engaging with classmates, functional academics.

From the initial screening 95 children were found be positive for MR and after the screening by doctor out of these 95 only 52 of children found to be mentally retarded in true sense.

Modified Uday Parekh scale was used to define socio-economic status among rural populations in India and is used even in this paper in rural population of chosen area for study. SPSS is also used.The variables included in this scale are as under: Caste (1–6) Occupation (0–6) Education (0–6) Land (0–6) Social participation (0–6) Family members (1–2) House (1–6) Farm power (1–6) Material possession (max = 6).

Parental permission was sought before including the child up to 7 years of age in the study after ensuring that participants privacy will be kept, proper information will be given, no forced information be taken and pleasant atmosphere will be given.

## OBJECTIVES

1.The study examine the socio-demographic background of parents with mentally retarded children.

2.Investigate the ways in which these factors affect the children with mental retardation.

Tables given below shows the socio-demographic profile of children participated in study and socio-demographic background of parents of children who participated in this study.

**Table 1: Socio-demographic Profile of Children with Mental Retardation**

| Variables | | Number | Percentage |
|---|---|---|---|
| Age | 1 – 2 | 86 | 25.5 |
| | 3 - 5 | 97 | 28.6 |
| | 6 - 8 | 103 | 30.5 |
| | 8-10 | 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 | 285 | 84.3 |
| | Christian | 16 | 4.7 |
| | Muslim | 37 | 10.9 |

Table 1 presents the socio-demographic data collected from the participants of the study. The ages of the participants ranged anywhere from 1 to 10 years old. Children between the age of 6-8 years made up 30.5 percent of the total participants in this study. There were 67 percent male and 32 percent female among the total number of mentally retarded children. 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 majority of individuals in this population identify as Hindus (84.9%), followed by Muslims (10.9%) and then Christians (10.9 %).

**Table 2: Education Status of the Parents**

| Variables | Numbers | Percentage |
|---|---|---|
| Father's Education | | |
| Illiterate | 26 | 7.7 |
| Primary | 104 | 30.5 |
| Middle | 123 | 36.3 |
| Secondary | 68 | 20.2 |
| Graduates | 17 | 5.3 |
| Mother's Education | | |
| Illiterate | 36 | 22.5 |
| Primary | 114 | 33.7 |
| Middle | 75 | 22.2 |
| Secondary | 37 | 10.9 |
| Graduates | 76 | 10.7 |
| | | |

Table 2 presents the educational background of the parents of subjects in this study. According to findings fathers of the children who participated in the findings 30.5 finished primary and 36 percent finished middle school. More than 20 percent finished secondary school. Mothers of participants more in illiterate category. But in primary and higher education category mothers of participating children are better educated.

**Table 3: Occupational Status of the Parents**

| Variables | Number | Percentage |
|---|---|---|
| Father | | |
| Working | 324 | 95.9 |
| Non-Working | 14 | 4.1 |
| Mother | | |
| Working | 76 | 22.5 |
| Non-Working | 262 | 77.5 |
| Monthly Income | | |
| Low(<10K) | 209 | 61.9 |
| Moderate(10-15K) | 93 | 27.6 |
| High (>15K) | 36 | 10.6 |

Table 3 shows the percentage of fathers and mothers of participating children in working and non-working category and their monthly income. Percentage of working fathers is more than percentage of working mothers. Results of the study are discussed in next paragraph.

## FOLLOWING RESULT ARE OBTAINED FROM THE STUDY:

1. The crude prevalence of mental retardation in this region was found to be 2.15%, which is higher than prevalence reported in other parts of the country. According to the modified Uday Parekh scale used for assessing the socio-economic status of the families of the children examined in the first phase, (28.3%) belonged to middle class, (69%) belonged to the lower middle class and (2.6%) belonged to the lower class

Maximum children with mental retardation belonged to the lower middle class, (2.4%). In middle class mentally retarded children were only 1.16% and among lower class, (4.7%) mentally retarded children werefound.

2. The prevalence was more among males as compared to the female children. About 59.6% (31/52) of the mentally retarded children were males. Of these 16.1% male children belonged to the middle class, 77% belonged to the lower middle class and 6.45% belonged to the lower class. About 40.3% of mentally retarded children were females. Of these 14.2% belonged to the middle class, 80.95% lower middle class and 4.7% belonged to the lower class.

3. About 46.1% children were from families where the father had attended secondry school but mother has attained only primary school and 28.8% of the mentally retarded belonged to fathers who had attended middle school and mothers attended almost no school. Illiteracy was more prevalent among mothers.

4. Parents from higher income groups had more knowledge about mental retardation of their children than those in a low income earning capacities.

5. Parents in smaller age group of population has lower understanding of mental disabilities of their children and it is more so if they are living in nuclear family.

# Conclusion:

The prevalence of mental retardation varies across the different countries of the world with Atlanta, Georgia, US 0.33%, UK 0.34%, Australia 0.3%, Canada with a prevalence of 0.72% and China showing a prevalence of 0.93%. In India it varies from 0.72% in J and K to 2.3% in Karnataka. Present study revealed a prevalence of 2.15% in region under study which is on the higher side as compared to the rest of the country.

 The survival rate of children in Himachal Pradesh is quite high due to the efficient primary health care system in the state. The percentage of institutional deliveries in Himachal Pradesh is high (70%). This probably leads to the survival of children who have congenital anomalies or suffer birth trauma and later present with mental retardation. According to the study, the majority of the kids came from lower middle class and lower class homes. The family's living condition, the parent's profession, and his educational background may all have a significant role in diagnosis of mental retardation. This might be the case because parents with higher levels of education are more equipped to recognize mental illnesses and developmental delays in their children, which allows them to provide a more complete history. Those with more education may also be less afraid of social shame than those without it.

Poverty and social deprivation of parents apart from their age education profession and family system play a major role in the development of mental retardation in children. Perinatal infections, post-natal infections and lack of screening for congenital/chromosomal disorders are some of the common causes of mental retardation which are more often seen in the lower income strata of society. Further, the prevalence of certain other childhood conditions like cerebral palsy or other motor deficits, language delays, or hearing needs to worked out for arriving at true prevalence of mental retardation. As children mature, some develop anxiety or depression if they are socially rejected by other children or if they are disturbed by the realization that others see them as different and deficient. Well-managed, inclusive school programs can help to maximize social integration, thereby minimizing such emotional responses. Appropriate medical care and education given to the lower middle class families could go a long way in reducing mental retardation among children which is much higher in rural backward areas of India.

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