



Research Article

A STUDY ON KNOWLEDGE, ATTITUDE AND PRACTICE ON CHILD-REARING AMONG PARENTS HAVING CHILDREN WITH INTELLECTUAL DISABILITIES IN THRISSUR DISTRICT KERALA

Jubina Bency A.T¹, John George², Navya C.J³ and Saju, C R⁴

¹Department of Community Medicine, Jubilee Mission Medical College and Research Institute, Thrissur, Kerala, India

^{2,3,4}Department of Community medicine, Amala Institute of Medical Sciences, Thrissur, Kerala, India

ARTICLE INFO

Article History:

Received 26th October, 2016

Received in revised form 17th November, 2016

Accepted 4th December, 2016

Published online 28th January, 2017

Key words:

Knowledge, Attitude, Practice, Child rearing, Intellectual disability

ABSTRACT

Child-rearing is the process of promoting and supporting the physical, emotional, social and intellectual development of a child from infancy to adulthood. In India around 2% has mild level of intellectual disability and 0.5% severe level, In Kerala prevalence is around 1%. Intellectual Disability is an important public health issue because of its significant prevalence and the need for extensive support services. A descriptive study to assess the knowledge, attitude and practice of parents having children with intellectual disabilities regarding child rearing was conducted in special schools in Thrissur district, Kerala. The participants were either of the parents of children aged between 5-15 years. Data collection was done using KAP questionnaire and scoring system done by Ad Hoc classification. Results: Majority of the children were in the age group of 10-15 years with mean age of 11.7 + 2.8 years and among them 61.9 % were males. The mean knowledge score was 7.35 + 1.10, attitude score was 21.31 + 3.96 and practice score was 7.90 + 1.72. CONCLUSION: Parent's education, occupation and socio economic status had a significant role in determining their child rearing practices which in turn will lead better child development.

© Copy Right, Research Alert, 2017, Academic Journals. All rights reserved.

INTRODUCTION

Childrearing is the process of promoting and supporting the physical, emotional, social and intellectual development of a child from infancy to adulthood. It refers to the aspects of raising a child aside from the biological relationship¹ Child rearing practices are embedded in the culture and determine, to a large extent, the behaviors and expectations surrounding a child's birth and infancy. They also influence childhood, adolescence and the way these children parent as adults. Childrearing consists of practices which are grounded in cultural patterns and beliefs. A clearer understanding of childrearing practices, patterns and beliefs is essential. More specifically, knowledge of childrearing practices patterns and beliefs are important.²

Prevalence of intellectual disability in India is around 2% for mild level of intellectual disability and 0.5% for severe level of intellectual disability (defined as IQ less than 50³). The causes of severe level of intellectual disability can be determined in 60-70% of cases, as compared to mild level of intellectual disability where 35-55% remain idiopathic⁴. In Kerala prevalence is 1%⁵

ID is an important public health issue because of its prevalence and the need for extensive support services. Its management requires early diagnosis and intervention,

coupled with access to health care and appropriate supports. Identifying a cause enables focused interventions, treatments, surveillance, and appropriate counselling, with anticipation of possible medical or behavioural complications and a more specific prognosis.⁶

Aim

To study the knowledge, attitude and practice of parents having children with intellectual disability regarding child rearing practices in Thrissur district.

Objectives

1. To assess the level of knowledge, Attitude and Practice of parents having children with intellectual disability regarding child rearing practices in Thrissur district.
2. To find out the association between level of knowledge, Attitude & practice with selected socio demographic variables.
3. To determine the correlation between knowledge, Attitude & Practice of parents having children with intellectual disability regarding child rearing practices in Thrissur district.

METHODOLOGY

Study Design: Descriptive study

Study Setting: The present study was conducted in Institutions for mentally challenged in Thrissur district

Study subjects: Parents of intellectually disabled children aged between 5 to 15 years.

Inclusion criteria: Parents of intellectually disabled children who consented for the study.

Exclusion criteria: Parents of wheel chair bound children are excluded as these children are more dependent on their parents.

Sample size

Sample size was calculated using the formula $n = 4pq / d^2$ $p = 38.5%$ (Ref: prevalence of response to a question in a study done by Ram Laxhan ¹⁷) Since it is a cluster designing and considering the design effect of 2, total sample size will be 320.

Sampling Method: Cluster sampling

List of all special schools and the total number of students were obtained from the Department of Education, Thrissur.

Study subjects were chosen by Probability Proportionate to Size sampling. The sampling interval was obtained by dividing the total population size by the number of clusters to be surveyed that is 10 clusters and the sampling interval was found to be 150. A random number between 1 & 150 was chosen as 132. so 1st school was selected were 132 was included in the cumulative population column. The process was continued to assign clusters by adding 150 till the completion of clusters and from each cluster data were obtained from 32 parents who were willing to participate.

Data Collection Tools: KAP Questionnaire

Study procedure

After getting permission from the authorities of selected institutions a day was fixed for interview with parents. Those who cooperated and gave consent were enrolled for the study. Information regarding family and child details was collected. Knowledge, attitude and practice regarding child rearing was assessed using questionnaire prepared

Data analysis

Baseline characteristics of study subjects were explained in terms of frequency, percentage, mean and standard deviation. Association of level of knowledge, attitude and practice with selected Socio demographic variables were analyzed using chi square test. Fisher's Exact Test was used when expected count is less than 5. Spearman's Rank Correlation Coefficient was used to measure the strength and direction of the relationship between knowledge and attitude, knowledge and practice, and attitude and practice. The level of significance was estimated with 95% confidence intervals and P value <0.05.

RESULTS

Socio demographic characteristics of parents

Mean age of mothers were 40.11 ± 6.53 years, most of them were in the age group of 36-45 years (59.4%). Mean age of fathers were 46.15 ± 6.38 years, most of them were in the age group of 36-45 years. Religion wise, 52.19 %, were Hindus,

34.79 % were Christians and remaining 13.12 % were Muslims (fig 1). 83.7% belongs to nuclear family and 16.3% joint family. The average family size was 4.55 ± 1.04 .

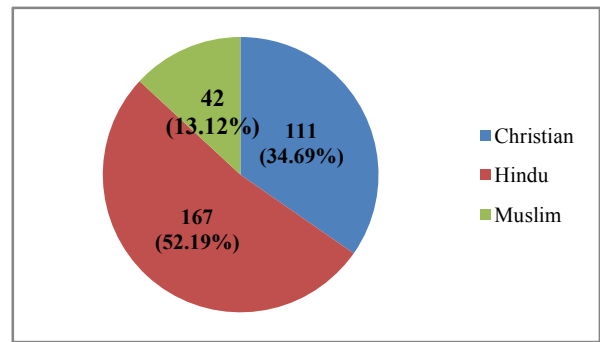


Fig 1 Distribution of study subjects according to Religion

The number of families ranged from two to eight members. 152 mothers (47.5%) had high school level of education, 35.94% had post high school education. 133 fathers (44.1%) had high school level of education, 31.9% had post high school diploma and 7.4% were graduates. none of them were illiterate. 222 (69.37%) mothers were unemployed, the rest were employed as - 33 (10.31%) semi skilled, 31 (9.7%) skilled, 16 (5%) clerk/shop, 10 (3.12%) were unskilled, 5 (1.6%) semi profession and professionals 3 (0.93%). 144 (48.48%) fathers had own shops, rest were employed as 117 (39.39%) skilled, 13 (4.37%) semi skilled, 4 (1.34%) unskilled, 5 (1.68%) unemployed, 12 (4.04%) semi profession and professionals 2 (0.7%).

According to modified Kuppuswamy's socio economic classification majority 136 (42.5%) were in the lower middle class. 10 (3.1 %) children were born out of consanguineous marriage (fig 2).

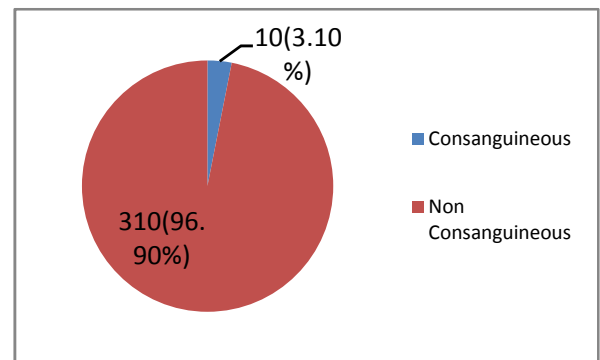


Fig 2 Distribution of Parents by Type of Marriage

Details of the Children

Mean age of children were 11.7 ± 2.8 . Most of them were in the age group of 10-15 years. Gender wise there were 61.9% males and 38.9% female children. Majority of them - 179 (55.9%) were of first birth order. Most of them 186 (58.1 %) had 1 sibling, 14.4 % were the only child with no siblings. 70.3 % children were born out of normal delivery, 27.5% by lower segment caesarean section and 2.2 % by assisted instrumental delivery. 46 (14.4 %) had preterm delivery. 124 (38.8%) children had post natal complications and among them the most common was delayed cry (47.4%). (fig 3)

Mean birth weight was 1.45 ± 0.49 kg and 145 children (45.3 %) had history of low birth weight (Table 1). 91.6 % children had delayed developmental mile stone.

Table 1 Distribution of Children According To Birth Weight

Birth weight	Number	Percentage
LBW (<2.5kg)	145	45.3
Normal (≥ 2.5 kg)	175	54.7
Total	320	100

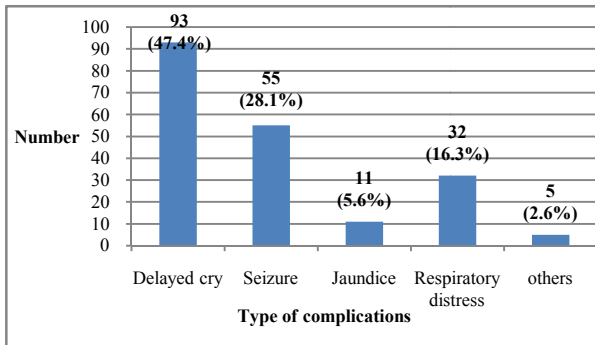


Fig 3 Distribution According To The Type of Complications Within 24 Hours

123 mothers (38.4%) had complications during their pregnancy and delivery, among them prolonged labour was found to be the major cause (fig 4). 12.5 % had family history of ID, found to be higher among second degree relatives.

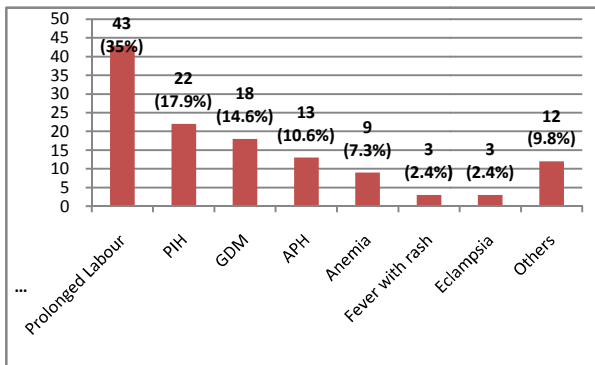


Fig 4 Distribution According To The Type Of Complications During Pregnancy & Delivery

Distribution of level of knowledge, attitude and practice on child rearing

55% of parents had moderate levels of knowledge and 45 % had high knowledge level. None of them had low level of knowledge (fig 5).

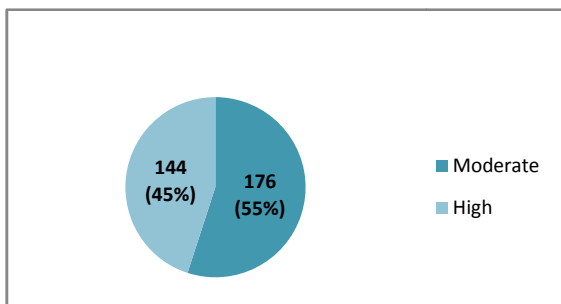


Fig 5 Distribution of Parents According To Level of Knowledge on Child Rearing

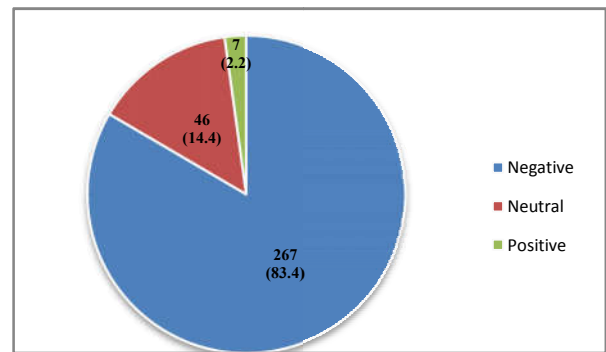


Fig 6 Distribution of Parents According To Level of Attitude Towards Child Rearing

Attitude wise majority of parents 267(83.4%) had negative attitude towards their intellectually disabled child. 46 (14.4%) parents had neutral and remaining 7 (2.2%) had positive attitude towards their child (fig 6). Majority 73.8 % parents had fair practice, 16.5 % had poor practice, only 9.7 % had good practice of child rearing (fig 7).

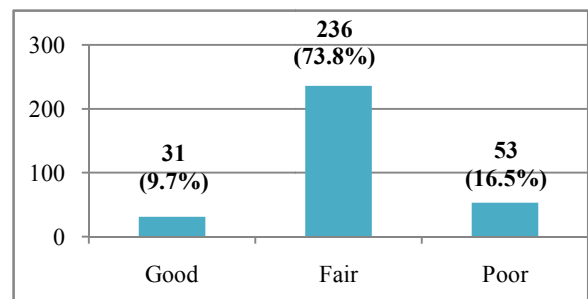


Fig 7 Distribution of parents according to level of practice on child rearing

Association between levels of knowledge and selected socio demographic variables

Level of knowledge was higher among mothers with high occupational status than those with lower level of jobs and the association was found to be statistically significant with p value <0.05. Mothers with higher educational status had high level of knowledge and it was found to be statistically significant with P value <0.05.

Parents with high socio economic status had high level of knowledge than low socio economic status parents The association between socioeconomic status and level of knowledge was found to be statistically significant with p value <0.05.

Parents in nuclear family had moderate level of knowledge compared to those in joint families who had higher level of knowledge but this association was not statistically significant.

Parents having children with ID of first birth order had high level of knowledge than parents with consecutive ones. Moderate level of knowledge is high among second birth order but the association was not statistically significant

Association between levels of attitude and selected demographic variables

Mothers who had completed their graduation had positive attitude towards their intellectually challenged children than those who had low level of education. This shows that

education has a positive impact on social attitudes and the association was found to be statistically significant with P value <0.05.

Mothers with high occupational status had positive attitude than mothers having low level of jobs and the association was found to be statistically significant.

In this study parents with high socio economic status had positive attitude than parents with low socio economic status and the association was found to be statistically significant with P value <0.05.

Positive attitude is more among parents living in nuclear family and negative attitude is higher among joint families and the association was not found to be statistically significant

Association between levels of practice and selected demographic variables

Mothers having high educational status had good practice and the association was found to be statistically significant

Good practice is higher among mothers having higher job level than those having lower level of jobs and unemployed mothers but the association was not statistically significant

Mothers aged less than 45 years had poor practice and the association between age of mother and level of practice was found to be statistically significant with P value <0.05.

Good practice is higher among parents having high socio economic status than parents with low socio economic status but the association was not found to be statistically significant.

Correlation between knowledge, attitude and practice

In this study there is a positive correlation between knowledge, attitude and practice. Parents with high knowledge level had a positive attitude and good practices of child rearing. Strong correlation was found between knowledge and practice (Table 2).

Table2 Correlation between Knowledge, Attitude & Practice

Correlation	Correlation coefficient	P value
Knowledge vs Practice	0.61	0.01*
Knowledge vs Attitude	0.56	0.03*
Attitude vs Practice	0.156	0.005*

* P value Significant

DISCUSSION

The mean age was found to be 40.11±6.53 years, Majority of mothers were in the age group of 36-45 years (59.4%). In a study done by Rejani Thudalikunnil Gopalan et al ⁷ where the mean age of mothers was found to be 34.27± 5.85 years In this study, mean age of fathers were found to be 46.15 ± 6.38 and this finding is almost similar to the study done by Rejani Thudalikunnil Gopalan et al ⁷ where the mean age was 41.25±7.36years.

In this study parents were found to be educated, none of them were illiterate and this finding is consistent with the high literacy rate in Kerala. According to the census 2011, the total literacy rate in Thrissur district is 95.08% and male literacy rate is 96.78 % and female literacy rate is 93.56 %.Various

studies reports low levels of education of parents increase the risk for intellectual disability in children ^{8,9}.

In a study done by Rejani Thudalikunnil Gopalan et al ⁷ they found out majority of them were from low socio economic status. Studies have consistently reported association between poverty and intellectual disabilities.¹⁰

Socio economic status of the parents is related to the retardation of the child. It was found that parents from lower socio economic class usually give birth of mildly retarded child, low-income children are more likely to experience gestational and birth complications, have limited access to high-quality health care and nutrition, have greater exposure to environmental toxins, receive less cognitive stimulation from their home environments, and attend less optimal schools ¹¹

The mean age was 11.7 ± 2.8. Majority of them 221(69.1%) were in the age group of 10-15 years. This finding is consistent with the study done by Amit Nagarkar ¹² where the mean age was around 11.6 years ± 5.11. Many studies have shown that overall prevalence of Intellectual Disability is higher among males.^{12,13} The gender ratio is approximately 1.3:1. Some people believe the male central nervous system is more susceptible to damage. Others believe that males are more likely to show Intellectual Disability than females because some forms of Intellectual Disability are caused by abnormalities on the X chromosome. Because boys have only one X chromosome, they may be more susceptible to disabilities caused by damage to this chromosome (Hodapp et al., 2006; Stromme & Hagberg, 2000).

In a study done by Rejani Thudalikunnil Gopalan et al ⁷ they found out 36.9 % had history of low birth weight. In many studies like Croen Lisa A., Grether Jutish K., & Selvin Steve (2001) Winnepenninckx Birgitta, Rooms Liesbeth and Kooy R. Frank (2003) they found out low birth weight as an etiological cause for ID¹³

In Rejani Thudalikunnil Gopalan et al study they found out Delayed birth cry among 20.4% children. In Persha Amarjyothi et al¹⁴ study they found out neonatal seizures and infections were the best indicators of developmental delay characteristic of intellectual disability. Infection in brain, birth anoxia and trauma were major aetiological categories in addition to a large number forming unknown category and these causes have been found out in this study.^{15,13}

In this study 40(12.5 %) had family history of ID which is higher than Amit Nagarkar et al study where they found out family history in 8.4 % children.

Familial Intellectual Disability results from the interaction of the child's genes and environmental experiences over time. Today, many experts refer to people in this category as experiencing cultural-familial Intellectual Disability because children in this group are believed to experience Intellectual Disability due to a combination of environmental deprivation (e.g., low levels of cognitive stimulation, poor schools) and genetic diathesis toward low intelligence (Iarocci & Petrill, 2012). The population based study of Hou et al (1998) reported that 15% of the families in a large population have a positive history of intellectual disability.

A study was conducted in Kingston to assess the knowledge of mothers regarding care of their

intellectually defective child. most of the mother had deficient knowledge on care of defective child. Many of the mothers considered their defective child as a burden and isolated in house. 15% of mothers had good knowledge, 27% moderate, and 48% of the mothers had very poor knowledge regarding care of defective child¹⁶.

CONCLUSION

In this descriptive study, it was found that the knowledge level of parents of children with ID regarding child rearing was moderate to high, attitude and practice was found to be unsatisfactory. Parent's education, occupation and socio economic status had a significant role in determining their child rearing practices which in turn will lead to a better child development. So, interventions have to be focused on specific areas to improve the attitude and practice of parents with intellectually disabled children on child rearing.

The extend of problem of intellectually disabled child and their parents is still not fully appreciated by the society and the Government. There is a dominantly pessimistic view and despondency among the parents of these children which also needs to be addressed to alleviate their mental sufferings by extending social and economic supports.

Recommendations

1. Attempts must be made to sensitize the population at large in regard to the problems encountered by these children and their parents so that a more supportive attitude will prevail and dispel the currently health misconceptions and prejudices.
2. Parents of these children should be identified early in the course of their life so that they may have better understanding and practical knowledge to manage these children appropriately.
3. There is a largely preventable element in the genesis of this condition which, given adequate MCH care especially during antenatal and intranatal care could be averted
4. All health and educational functionaries should be sensitised to the problem so that early intervention can be instituted.
5. Attention should be focussed on communication and efforts to improve the quality of life of these children.

Limitations

1. Since this is an institutional based study, parents may have a better knowledge, attitude and practice.
2. Some degree of recall bias might have occurred.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: the study was approved by the Institutional Ethics Committee

References

1. Davies, Martin The Blackwell encyclopedia of social work. Wiley-Blackwell 2000. p. 245. ISBN 978-0-631-21451-2.
2. Evans JL, Myers RG. Child rearing practices: Creating programs where traditions and modern practices meet, 1994
3. Srinath S, Girimaji SC. Epidemiology of child and adolescent mental health problems and mental retardation. *NIMHANS Journal*. 1999;17:355-66.
4. Kabra M, Gulati S. Mental retardation. *Indian Journal of Pediatrics*. 2003;70:153-58
5. Kerala state mental health authority, www.ksmha.org
6. Moeschler JB, Shevell M, Committee on Genetics. Comprehensive evaluation of the child with intellectual disability or global developmental delays. *Pediatrics* 2014; 134:e903
7. Rejani Thudalikunnil Gopalan, Rajesh Sharma and Machat Puthur Unnikrishnan Socio-Demographic and Clinical Features of Children with Intellectual Disability and Their Parents-an Indian Study *International Neuropsychiatric Disease Journal* 2(6): 289-302, 2014
8. Chapman DA, Scott KG, Stanton-Chapman TL. A public health approach to the study of mental retardation. *American Journal on Mental Retardation*. 2008;113:102-16.
9. Williams LO, Decouflé P. Is maternal age a risk factor for mental retardation among children *American Journal of Epidemiology*. 1999;149:814-23.
10. Hack M, Klein NK, Taylor HG. Long-term developmental outcomes of low birth weight infants. *Future Child*. 1995;15:176-96.
11. Emerson E. Poverty and people with intellectual disabilities. *Mental Retardation and Developmental Disabilities Research Reviews*. 2007;13:107-13.
12. Amit Nagarkar, Jagdish Prashad Sharma, S. K. Tandon, Pritesh Goutam The clinical profile of mentally retarded children in India and prevalence of depression in mothers of mentally retarded *Indian J Psychiatry* 2014;56:165-70.
13. Winnepeninckx Birgitta, Rooms Liesbeth and Kooy R. Frank (*The British Journal of Developmental Disabilities* 2003 Volume 49 No 96 Page 29-44
14. Persha Amarjyothi, Arya Saroj, Nagar R.K., Behera P., Verma R.K. & Kishore M.T. *Asia Pacific Disability Rehabilitation Journal* 2007 Volume 18 Page 93-100
15. Davis Sharon The Arc's Human Genome Education Project 1997 USA
16. Warren S F., Brady N C. The Role of maternal responsiveness in the development of children with intellectual disabilities. University of Kansas, Lawrence, USA. 2007; 13(4):330-8. Pub Med
17. Ram lakhan, Manoj sharma A Study of knowledge, attitudes and practices (kap)survey of families toward their children with intellectual disability in barwani, *India Asia Pacific Disability Rehabilitation Journal* Vol. 21 No. 2 2010
