

A Study to Assess the Knowledge Regarding Care of Child with Autism among their Parents in a Selected Health Care Setting at Bangalore

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ABSTRACT - The autism word derived from Greek word 'autos' means 'self'. Autism is a brain development disorder that is characterized by impaired social interaction, communication, restricted and repetitive behaviour all starting before a child is three years old. The objective of the study was to assess the knowledge regarding care of child with autism among the parents in a selected health care setting at Bangalore. The study was conducted to improve the knowledge among parents of autistic child on care of child with autism. A quantitative approach with Non experimental descriptive survey design was used for the study. Hundred samples were selected by non-probability convenience sampling technique. The study instrument used was as follows: demographic data and structured knowledge questionnaire. The tools were administered after obtaining the administrative and informed consent. The collected data were analysed using descriptive and inferential statistics with the help of SPSS version 20.0. It was inferred that regarding over all knowledge, majority of the parents 57 (57%) had moderate knowledge, 31 (31%) of them had adequate knowledge and 12 (12%) of them had inadequate knowledge.

Key words - Assess, Knowledge, Child, Autism, Parents

I. INTRODUCTION

The autism word derived from Greek word 'autos' means 'self'. Autism is a brain development disorder that is characterized by impaired social interaction, communication, restricted and repetitive behaviour all starting before a child is three years old. Autism has been characterized as a pervasive developmental disorder (PDD) as a disorder of affective contact as an organic dysfunction of biological origin and as neurological or brain disorder that affects a person's communication, forming relationships with others and responds inappropriately to the environment. Children affected by autism fall along a spectrum of "high-functioning" individuals to individuals who lack any means of communication with others.

NEED FOR THE STUDY

In World the prevalence rate of autism is 7.7/10,000 which is a prevalence rate of 30% in those with learning disability. Autism is estimated to occur in 1/166 births. Approximately 50 children are diagnosed with autism per day. Individuals diagnosed with autism are estimated to be 1.5 million. April 2nd is declared as World Autism Awareness Day (WAAD) across the globe. In India the prevalence rate of autism is 1 in 150, approximately 4 million. The Autism cases have risen sharply over the last couple of decades. They were 17.40 lakhs in 2005, 40 lakhs in 2006 and today the autism-affected population in India would be close to a crore. The World Health Organization states that one in every 500 persons suffers from autism and approximately two million Indians battle the disorder every day.

1.1. STATEMENT OF THE PROBLEM

A study to assess the knowledge regarding care of child with autism among their parents in a selected health care setting at Bangalore

1.2. OBJECTIVES OF THE STUDY

1. To assess the knowledge regarding care of child with autism among their parents.
2. To associate the knowledge regarding care of child with autism among their parents with the selected demographic variables.

1.3. HYPOTHESES

- **H₁:** There will be significant association on knowledge regarding care of child with autism among their parents with the selected demographic variables

II. RESEARCH METHODOLOGY

Research methodology is a way to systematically solve the research problem. It consists of the various steps that are generally adopted by a researcher in studying the problem along with the logic behind them. The methodology of research indicates the general pattern of organizing the procedure for gathering valid and reliable data for the purpose of the study. This chapter deals with description of methodology and different steps which are undertaken for collecting and organizing data for investigation. It includes research approach, research design, research setting, population, sample and sample size, sampling technique, study instrument used, procedure for data collection and plan for data analysis.

Research approach	Quantitative approach
Research design	Non experimental descriptive survey design
Research setting	Academy for severely handicapped and autism (ASHA), Bangalore
Population	Parents of autistic children in ASHA (Bangalore)
Sample and sample size	Hundred parents of autistic children in ASHA
Sampling technique	Non Probability Convenience sampling technique
Study Instruments used	Tool-1: Demographic data Tool-2: Structured knowledge questionnaire
Procedure for data collection	After obtaining the permission from concerned authorities and informed consent from the samples, the investigator collected the baseline demographic data.
Plan for data analysis	Descriptive and inferential statistics with the help of SPSS version 20.0 was used for analysis of data

III. RESULTS

1.4. Demographic data among parents of autistic children

- Regarding age, the majority of the parents 32 (32%) belong to 26-30 years and above 40 years, 22 (22 %) of them belong to 36-40 years, 8 (8%) of them belong to 21-25 years and 6 (6%) of them belong to 31-35 years.
- With regard to gender, most of the respondents 88 (88%) were females and 12 (12%) of them were males.
- In relation to religion, majority of the parents 67 (67%) belong to Hindu, 20 (20%) of them belong to Christian, 13 (13%) of them belong to Muslim and none of them belong to other religion.
- With regard to education, majority of the parents 46 (46%) had graduate education, 35 (35%) of them had higher secondary, 13 (13%) of them had secondary schooling, 6 (6%) of them had primary schooling and none of them were illiterate.
- Regarding occupation, majority of the parents 63 (63%) were private employee, 18 (18%) of them were unemployed, 12 (12%) of them were government employee and 7 (7%) of them were daily wages.
- With regard to the family income, majority of the parents 59 (59%) had income above 5000 Rs/month, 28 (28%) of them had income between 3001-5000 Rs/month, 13 (13%) of them had income between 1501-3000 Rs/month and none of them had income below 1500 Rs/month.
- In relation to type of marriage, majority of the parents 64 (64%) belong to non consanguineous marriage and 36 (36%) of them belong to consanguineous marriage.
- Regarding type of family, majority of the parents 75 (75%) belong to nuclear family and 25% of them belong to joint family.
- With regard to residence, all parents 100 (100%) belong to urban area and none of them belong to rural area.
- With regard to awareness of autism, all parents 100 (100%) were aware about autism.
- Regarding source of information, majority of the parents 73 (73%) got information through health professionals, 27 (27%) of them got information through mass media and none of them got information thorough family members and neighbours.
- With regard to age of autistic child, majority of the autistic children 40 (40%) belong to above 7 years, 39 (39%) of them belong to 6-7 years, 21 (21%) of them belong to 4-5 years and none of them belong to 2-3 years.
- In relation to birth order of autistic child, majority of the autistic children 53 (53%) belong to birth order 1, 31 (31%) of them belong to birth order2, 16 (16%) of them belong to birth order 3 and none of them belong to birth order above 3.
- With regard to siblings of the autistic child, majority 56 (56%) of the autistic children had no siblings, 44 (44%) of them had 1-2 siblings and none of them had 3-4 and above 4 siblings.

1.5. Assessment of knowledge regarding care of child with autism among their parents

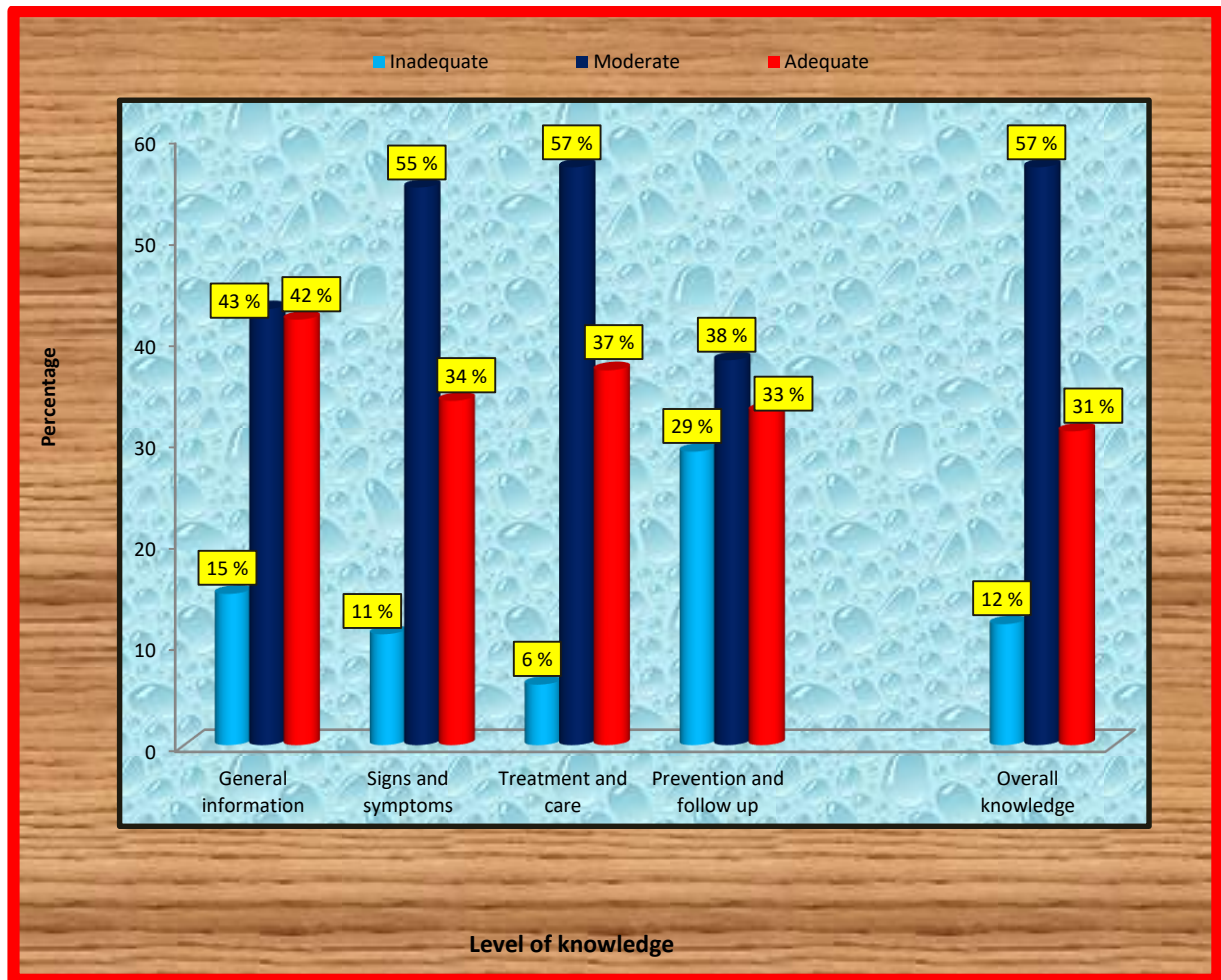
Frequency and percentage distribution of knowledge regarding care of child with autism among their parents

N=100

Domain	Inadequate		Moderate		Adequate	
	<50		50-75%		>75	
	No	%	N	%	N	%
Level of knowledge	12	12	57	57	31	31

Table 1 depicting knowledge regarding care of child with autism among their parents

Regarding over all knowledge, majority of the parents 57 (57%) had moderate knowledge, 31 (31%) of them had adequate knowledge and 12 (12%) of them had inadequate knowledge.



Graph 1 depicting level of knowledge regarding care of child with autism among their parents

1.6. Association of knowledge regarding care of child with autism among the parents with the selected demographic variables

n = 100

Sl. No	Demographic variables	Sample (n)	Knowledge level of parents				Chi - square (χ^2) value
		No. (100) %	≤ Median		> Median		
			No. (55)	%	No.(45)	%	
1.	Age (in years)						$\chi^2=0.87$ df = 4 NS
	a. 21-25	8	4	7.2	4	8.9	
	b. 26-30	32	17	30.9	15	33.3	
	c. 31-35	6	2	3.7	4	8.9	
	d. 36-40	22	14	25.4	8	17.8	
e. Above 40	32	18	32.8	14	31.1		
2.	Gender						$\chi^2=0.53$ df = 1 NS
	a. Male	12	9	16.4	3	6.6	
	b. Female	88	46	83.6	42	93.4	
3.	Religion						$\chi^2 = 0.73$ df = 2 NS
	a. Hindu	67	33	60.0	34	75.5	
	b. Muslim	13	9	16.4	4	8.9	
	c. Christian	20	13	23.6	7	15.6	
	d. Others	0	0	0	0	0	
4.	Education						$\chi^2=0.56$ df = 3 NS
	a. Illiterate	0	0	0	0	0	
	b. Primary	6	6	10.9	0	0	
	c. Secondary	13	8	14.5	5	11.1	
	d. Higher secondary	35	18	32.8	17	37.7	
e. Graduate	46	23	41.8	23	51.2		
5.	Occupation						$\chi^2=0.99$ df = 3 NS
	a. Unemployed	18	10	18.2	8	17.8	
	b. Daily wages	7	4	7.2	3	6.6	
	c. Private employee	63	36	65.4	27	60.0	
	d. Government employee	12	5	9.2	7	15.6	

S = Significant *P<0.05, **P < 0.01 and ***P< 0.001, NS = Non-Significant

The above table 2.1 shows the association of knowledge regarding care of child with autism among their parents with the selected demographic variable.

In relation to demographic variables such as age, gender, religion, education and occupation were found to be non-significant in association with level of knowledge among parents of autistic children

Table 2.2: Association of knowledge regarding care of child with autism among their parents with the selected demographic variables

n = 100

Sl. No	Demographic variables	Sample (n)	Knowledge level of parents				Chi - square (χ^2) value
		No. (100) %	≤ Median		> Median		
			No. (55)	%	No.(45)	%	
6.	Family income (Rs /Month)						$\chi^2 =7.77$ df = 2 S*
	a. Below 1500	0	0	0	0	0	
	b. 1501-3000	13	1	1.9	12	26.7	
	c. 3001-5000	28	7	12.7	21	46.6	

	d. Above 5000	59	47	85.4	12	26.7	
7.	Type of marriage						$\chi^2 = 2.31$ df = 1 NS
	a. Consanguineous marriage	36	5	9.2	31	68.9	
	b. Non consanguineous marriage	64	50	90.8	14	31.1	
8.	Type of family						$\chi^2 = 0.77$ df = 1 NS
	a. Nuclear family	75	39	70.9	36	80.0	
	b. Joint family	25	16	29.1	9	20.0	
9.	Residence						χ^2 test invalid
	a. Rural	0	0	0	0	0	
	b. Urban	100	55	100	45	100	
10.	Awareness of autism						χ^2 test invalid
	a. Yes	100	55	100	45	100	
	b. No	0	0	0	0	0	
11.	Source of information						$\chi^2 = 0.87$ df = 1 NS
	a. Family members	0	0	0	0	0	
	b. Neighbors	0	0	0	0	0	
	c. Health professionals	73	42	76.4	31	68.9	
	d. Mass media	27	13	23.6	14	31.1	

S = Significant *P<0.05, **P < 0.01 and ***P< 0.001, NS = Non-Significant

Table 2.2 shows the association of knowledge regarding care of child with autism among their parents with their selected demographic variable.

In relation to demographic variables such as type of marriage, type of family and source of information were found to be non-significant in association with level of knowledge among parents of autistic children.

In relation to demographic variables such as family income was found to be statistically significant in association with level of knowledge among parents of autistic children at 5% P level i.e. P< 0.05.

Table 2.3: Association of knowledge regarding care of child with autism among their parents with the selected demographic variables

n = 100

Sl. No	Demographic variables	Sample (n) No. (100) %	Knowledge level of parents				Chi - square (χ^2) value
			≤ Median		> Median		
			No.(55)	%	No.(45)	%	
12.	Age of the autistic child (in years)						$\chi^2 = 0.16$ df = 2 NS
	a. 2-3	0	0	0	0	0	
	b. 4-5	21	17	30.9	4	8.9	
	c. 6-7	39	17	30.9	22	48.9	
	d. Above 7	40	21	38.2	19	20.2	
13.	Birth order of autistic child						$\chi^2 = 0.97$ df = 2 NS
	a. 1	53	28	50.9	25	55.6	
	b. 2	31	19	34.6	12	46.6	
	c. 3	16	8	14.5	8	17.8	
	d. Above 3	0	0	0	0	0	
14.	Siblings of autistic child						$\chi^2 = 0.99$ df = 1 NS
	a. Nil	56	30	54.5	26	57.8	
	b. 1-2	44	25	45.5	19	20.2	
	c. 3-4	0	0	0	0	0	
	d. Above 4	0	0	0	0	0	

S = Significant *P<0.05, **P < 0.01 and ***P< 0.001, NS = Non Significant.

Table 2.3 shows the association of knowledge regarding care of child with autism among their parents with their selected demographic variable.

In relation to demographic variables such as age of autistic child, birth order of autistic child and siblings of autistic child were found to be non-significant in association with level of knowledge among parents of autistic children.

IV. CONCLUSION

The level of knowledge regarding care of child with autism was assessed wherein 57 (57%) of the parents had moderate knowledge, whose score ranged between 50-75%, 31 (31%) of them had adequate knowledge, whose score range was more than 75% and 12 (12%) of them had inadequate knowledge, whose score range was less than 50%. The mean knowledge score obtained by the parents was 20.74 with SD of 4.84. This indicates that the level of knowledge regarding care of child with autism among their parents was at moderate level and they need more information regarding care of child with autism.

V. RECOMMENDATIONS

1. A similar study can be undertaken by utilizing other domains like practice.
2. A similar study can be undertaken on large scale for wider generalization.
3. A similar study can be conducted on different population such as teachers, nurses and other health professionals.

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