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An Exploratory Study to Assess the Knowledge and Attitude of Parents of Children with Autism in a Selected Center in Bilaspur, Chhattisgarh.

Indrajeet Sahu [a], Shweta Sharma [b]*

[a] *College of Nursing, PGIBAMS, Pt. Deendayal Upadhyay Memorial Health Sciences and Ayush University, Raipur, Chhattisgarh, India*
[b] *National Health Mission, Balodabazar, Chhattisgarh, India*

A B S T R A C T

Background: Autism refers to a condition in which a person's ability to learn and to function is more limited than that of others of the same age. During infancy and the toddler years, a child may be considered only a bit slow, although delays in development, in language, and motor skills may be apparent. A diagnosis of autism, however, is often not made until the child is in elementary school and has difficulty in mastering academic skills.

Objectives: - To assess the knowledge and attitude of parents concerning autistic children. To find out the association between the knowledge and attitude of parents with selected socio-demographic variables.

Methods: This is a non-exploratory study conducted at the Mental Development and Rehabilitation Centre, Bilaspur, Chhattisgarh, from September 2017 to October 2017. A total of 30 parents with autistic children were selected using a non-probability purposive sampling technique. A self-structured form was used to assess their knowledge and attitude regarding autism. Data was statistically analysed using descriptive statistics and the chi-square test.

Results: A total of 30 parents participated. The parents' ages ranged from 20 to over 36 years, with 65% being females and 35% being males. Almost 35% of the parents had higher education, 23.3% of the parents were illiterate, 21% of the parents were graduates, and 20% of the parents were postgraduates. About 51.7% of parents were getting information from television, 20% from other mass media, 16% from radio, and 11.7% from newspapers. None of the parents have poor knowledge of autism, about 43.3% have average knowledge, and 56.7% of parents have good knowledge. The level of attitude on autistic children among parents is about 80% having a good attitude, and 20% of parents have an excellent attitude. There was a significant association between the knowledge level of parents and the age and education of parents.

Conclusions: The study shows that parents of autistic children have more knowledge and a positive attitude regarding autistic children. The findings of the present study have implications for nursing practice, administration, education, and research.

Keywords: Autism, knowledge, Attitude, Parents, Bilaspur

Introduction

Autism spectrum disorder (ASD) involves a broad range of neurodevelopmental circumstances that mainly affect brain development (1). ASD is characterized by difficulties in social interactions, restrictive interests, and repetitive behaviours (2). The symptoms of autism usually manifest within the first three years of life, with some children displaying signs from birth, while others develop typically before experiencing a regression between 18 to 36 months (3). Raising a child with autism presents significant challenges for parents, particularly when societal understanding of the condition is limited (4). These difficulties often overlap with other developmental disorders, making diagnosis and They encounter obstacles both within the home and broader community settings (6). intervention complex. Parents may initially struggle to cope with the diagnosis, feeling overwhelmed as they seek appropriate support and care options (5).

Research suggests that parents who receive an early ASD diagnosis for their child tend to experience lower levels of stress and anxiety (7). However, studies conducted in different regions indicate varying levels of parental awareness regarding autism. For instance, findings from Saudi Arabia's Aseer area revealed that most parents possessed limited knowledge about ASD (8), while other studies suggested that a majority demonstrated adequate awareness of the condition (9).

Parental stress is understandable, given the unique challenges associated with autism, including social stigma. Beyond the difficulties faced by children with autism, it is also crucial to examine whether parents experience stigmatization due to raising a child with ASD. Understanding this impact is important, as parents play a fundamental role in shaping their child's development. As autism continues to rise in prevalence, assessing parental knowledge

and attitudes is essential for improving support systems and ensuring better outcomes for affected families. Therefore, the present study aims to explore the awareness and perceptions of parents regarding autism spectrum disorder.

Objectives

1. To assess the knowledge and attitudes of parents of children with autism
2. To find out the association between the knowledge and attitude of parents of children with autism with selected socio-demographic variables.

Materials and Methods

The study used an exploratory research design based on a cross-sectional study and a non-probability convenience sampling technique. That is a Self-structured questionnaire technique. The tool was separated into two portions: demographic variables and a questionnaire. The study was conducted from September 2017 to October 2017 in the mental development and rehabilitation centre, Bilaspur, C.G. The study population comprises parents of children with autism from the mental development and rehabilitation centre, Bilaspur, C.G. The data were analysed using descriptive and inferential statistics with frequency, percentage, chi-square test, and p-value test.

Sample and Sampling Technique

The total sample size was 30 parents of children with autism from the mental development and rehabilitation centre, Bilaspur, Chhattisgarh, who were selected using a non-probability purposive sampling technique.

Inclusion/Exclusion Criteria

Eligible parents are in the age group of 25 to 40 years. Eligible parents are available during the data collection period and are willing to participate in the study.

Parents below 25 years and above 40 years of age, and who are not willing to participate in the study.

Data Analysis

All acquired data was input and analysed using Microsoft Excel 2011. Data were summarized in percentage and frequency distribution tables, and association was tested using the chi-square test, p-value, and graphical data display methods.

Results

Demographic Variables

The descriptive statistics revealed that regarding gender, 65% of females and 35% of males participated in the study. Maximum (40%) belonged to the age group of 36 years and above, and 25% belonged to the 26-30 years age, 20% belonged to the 31-35 years age, and 15% belonged to the 20-25 years age. Mostly participants (71.2%) were Hindu, (15.3%) were Muslim, and 13.6% were Christian. The determined (63.3%) of participants belonged to a nuclear family, and 36.7% belonged to a joint family. (46.7%) Participants having 2 children (30%), having 3 children (13.3%), participants having more than four children, and only 10% having one child. (35%) The educational status of the maximum participants was up to primary/higher school (23.3%), were illiterate (21%), were graduates (20%), and were post-graduates (20%). Maximum (41.7%) parents had private jobs, (31.7%) had government jobs, and (26.7%) had other jobs. Mostly (31.7%) were having family income above 8001 Rs., (28.3%) having 5001-8000 Rs., (26.7%) having 2001-5000 Rs., and (13.3%) having below 2000 Rs., Maximum (73.3%) participants were living in rural area and (26.7%) participants were living in urban area. Maximum (51.7%) participants were using television as a means of mass media, (20%) were using other mass media, (16.7%) were using radio, and (11.7%) participants were getting newspapers as a means of mass media. (Table 1).

Knowledge and attitude of parents regarding children with autism

(Graphs 1 & 2) shows the level of knowledge on autistic children among parents. None of them had poor knowledge, 43.3% of participants had average knowledge, 56.7% of participants had good knowledge, and none of them had excellent knowledge. The overall knowledge score is 53.7%, the mean is 10.73, and the SD is 2.09. Table 3 shows the level of attitude about autistic children among parents. None of them has a highly negative/negative attitude. Around 80% of the participants ought to have a positive attitude, and 20% of the participants ought to have a highly positive attitude. The overall attitude score is 65.5%, the mean is 47.15, and the SD is 6.67.

Association between knowledge and attitude regarding autistic children with selected demographic variables

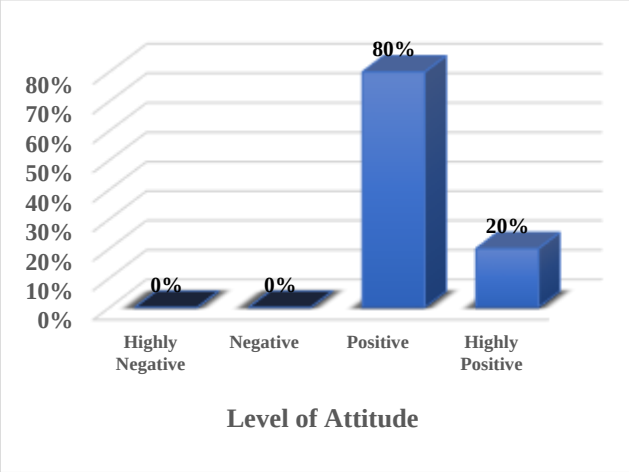
The association with the knowledge level of participants is observed with demographic variables such as gender, age, religion, type of family, number of children, education, occupation, monthly income, area, and mass media exposure. The significance of the association between them was analysed by the

Chi-square test. The calculated value of chi-square for the gender of parents, 0.24 (p=0.62), df=1, at 5 5% level was not significant. The calculated value of chi-square for the age of parents is 9.81 (p=0.02), df=3, which shows a significant association with knowledge. In religion calculated, i.e., 1.65% (p=0.43), df=2, which shows no significant association with knowledge. The type of family of parents is 0.68 (p=0.41), df=1, which shows a non-significant association with knowledge. The number of children of parents, the occupation of parents, and the monthly income of parents show no significant association with knowledge. Hence, it is concluded that the age of parents, education, and the area of living are factors that show a significant association with knowledge. (Table 2 & 3).

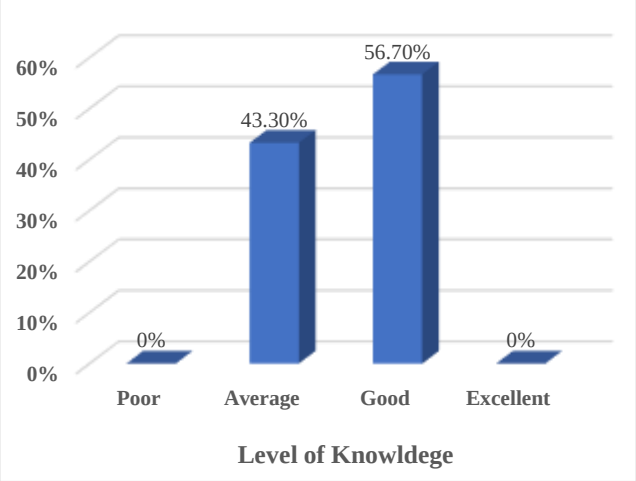
Table 1: Socio-demographic Variables(N=30)

SN	Demographic Variables		Frequency	%
1	**Gender**	Male	11	35%
		Female	19	65%
2	**Age**	20 -2 years	5	15%
		26-3 years	7	25%
		31-3 years	6	20%
		<35 years	12	40%
3	**Religion**	Hindu	21	71.2%
		Muslim	5	15.3%
		Christian	4	13.6%
4	**Type of Family**	Nuclear	19	63.3%
		Joint	11	36.7%
5	**No of Children**	One	3	10%
		Two	14	46.7%
		Three	9	30%
		<three	4	13.3%
6	**Education**	Illiterate	7	23.3%
		Primary/ higher	10	35%
		Graduate	7	21.7%
		Post graduate	6	20%
7	**Occupation**	Private	13	41.7%
		Government	9	31.7%
		Others	8	26.7%
8	**Monthly Income**	Below rs. 2000	4	13.3%
		Rs.2001-5000	8	26.7%
		Rs.5000-8000	9	28.3%
		<rs.8000	9	31.7%
9	**Area of Living**	Urban	8	26.7%
		Rural	22	73.3%
10	**Mass Media**	TV	15	51.7%

		Newspaper	4	11.7%
		Radio	5	16.7%
		Others	6	20%



Graph 1: Level of attitude



Graph 2: Level of Knowledge

Table 2: Association between knowledge regarding autistic children with selected variables (N=30)

SN	Demographic Variables		Level of Knowledge				Total	Chi-square test
			Average		Goods			
			n	%	n	%		
1	**Gender**	Male	5	47.6%	6	2.4%	11	**X2=0.24% P=0.62 DF=1, not Significant**
		Female	8	41.0%	11	59.0%	19	
2	**Age**	20 -2 years	4	77.8%	1	22.2%	5	**X2=9.81 P=0.02*, DF=3, Significant**
		26-3 years	4	60.0%	3	40.0%	7	
		31-3 years	2	33.3%	4	66.7%	6	
		<35 years	3	25.0%	9	75.0%	12	
3	**Religion**	Hindu	8	38.1%	13	61.9%	21	X2= 1.65 P=0.43 DF=2,not significant
		Muslim	2	44.4%	3	55.6%	5	
		Christian	3	62.5%	1	37.5%	4	
4	**Type of Family**	Nuclear	9	47.4%	10	52.6%	19	X2=0.68 P=0.41 DF=1,not significant
		Joint	4	36.4%	7	63.6%	11	
5	**No of Children**	One	1	33.3%	2	66.7%	3	X2=2.28 P=0.52 DF=3,not significant
		Two	8	53.6%	6	46.4%	14	
		Three	3	33.3%	6	66.7%	9	
		<three	1	37.5%	3	62.5%	4	
6	**Education**	Illiterate	4	64.2%	3	35.8%	7	**X2=8.22 P=0.04* DF=3, Significant**
		Primary/ higher	5	47.6%	6	52.4%	11	

		Graduate	1	23.1%	5	76.9%	6	
		Post graduate	1	16.7%	5	83.3%	6	
7	**Occupation**	Private	5	44.0%	7	56.0%	12	X2=0.01 P=0.99 DF=2, not significant
		Government	4	42.1%	6	57.9%	10	
		Others	3	43.8%	5	56.3%	8	
8	**Monthly Income**	Below rs. 2000	2	50.0%	2	50.0%	4	X2=1.90 P=0.59 DF=3, not significant
		Rs.2001-5000	4	50.0%	4	50.0%	8	
		Rs.5000-8000	2	29.4%	6	70.6%	8	
		<rs.8000	3	47.4%	6	52.6%	10	
9	**Area of Living**	Urban	2	31.3%	6	68.8%	8	**X2=5.37 P=0.02* DF=1, Significant**
		Rural	10	47.7%	12	52.3%	22	
10	**Mass Media**	TV	7	48.4%	9	51.6%	16	X2=4.26 P=0.23 DF=3, not significant
		Newspaper	1	28.6%	2	71.4%	3	
		Radio	1	20.0%	4	80.0%	5	
		Others	4	58.3%	2	41.7%	6	

Table 3: Association between knowledge regarding autistic children with selected variables (N=30)

SN	Demographic Variables		Level of Attitude				Total	Chi square test
			Positive		Highly Positive			
			n	%	n	%		
1	**Gender**	Male	10	95.2%	1	4.8%	11	**X^2=4.68 P=0.03* DF=1, Significant**
		Female	14	77.8%	5	28.2%	19	
2	**Age**	20 -2 years	4	77.8%	1	22.2%	5	**X2=8.57 P=0.04* DF=3, Significant**
		26-3 years	4	60.0%	3	40.0%	7	
		31-3 years	2	33.3%	4	66.7%	6	
		<35 years	3	25.0%	9	75.0%	12	
3	**Religion**	Hindu	8	38.1%	13	61.9%	21	X2=0.28 P=0.87 DF=2, not Significant
		Muslim	2	44.4%	3	55.6%	5	
		Christian	3	62.5%	1	37.5%	4	
4	**Type of Family**	Nuclear	9	47.4%	10	52.6%	19	X2=3.03 P=0.08 DF=1, not Significant
		Joint	4	36.4%	7	63.6%	11	
5	**No of Children**	One	1	33.3%	2	66.7%	3	X2=0.88 P=0.83 DF=3, not Significant
		Two	8	53.6%	6	46.4%	14	
		Three	3	33.3%	6	66.7%	9	
		<three	1	37.5%	3	62.5%	4	
6	**Education**	Illiterate	4	64.2%	3	35.8%	7	**X2=9.71 P=0.02* DF=3, Significant**
		Primary/ higher	5	47.6%	6	52.4%	11	
		Graduate	1	23.1%	5	76.9%	6	

		Post graduate	1	16.7%	5	83.3%	6	
7	**Occupation**	Private	5	44.0%	7	56.0%	12	X2=4.09 P=0.13 DF=2, not Significant
		Government	4	42.1%	6	57.9%	10	
		Others	3	43.8%	5	56.3%	8	
8	**Monthly Income**	Below rs. 2000	2	50.0%	2	50.0%	4	X2=7.08 P=0.07 DF=3, not Significant
		Rs.2001-5000	4	50.0%	4	50.0%	8	
		Rs.5000-8000	2	29.4%	6	70.6%	8	
		<rs.8000	3	47.4%	6	52.6%	10	
9	**Area of Living**	Urban	2	31.3%	6	68.8%	8	X2=1.73 P=0.19 DF=2, not Significant
		Rural	10	47.7%	12	52.3%	22	
10	**Mass Media**	TV	7	48.4%	9	51.6%	16	X2=1.24 P=0.74 DF=3, not Significant
		Newspaper	1	28.6%	2	71.4%	3	
		Radio	1	20.0%	4	80.0%	5	
		Others	4	58.3%	2	41.7%	6	

Discussion

The demographic characteristics of the study participants offer valuable insights into the socio-cultural and economic context influencing their behaviors and perceptions. A female majority (65%) among participants is consistent with findings from community-based health studies, where women often show higher participation due to their caregiving roles and greater availability during data collection hours (10). The age distribution, with 40% aged 36 and above, suggests a mature population likely to have established family roles, which may influence their health-seeking behavior and decision-making (11).

The religious structure, predominantly Hindu (71.2%), reflects national census trends and may influence cultural practices, health beliefs, and access to services (12). Similarly, the prevalence of nuclear families (63.3%) reflects the ongoing shift in Indian family structures, which has implications for social support systems and caregiving dynamics (13).

The educational profile, with 44.3% having primary or no formal education, highlights a potential barrier to health literacy and informed decision-making. Studies have shown that lower educational attainment is associated with reduced access to health information and services (14). The occupational data, with 41.7% in private jobs and 31.7% in government roles, indicates a relatively stable employment base, which may positively influence health insurance coverage and service utilization (15).

Income distribution reveals that only 31.7% earn above ₹8001/month, underscoring economic vulnerability. Income is a well-established determinant of health outcomes and access to care (16). The rural predominance (73.3%) among participants further emphasizes the need for targeted rural health interventions, as rural populations often face disparities in healthcare access and infrastructure (17).

Finally, television as the primary mass media source (51.7%) suggests its continued relevance in health communication strategies. However, the limited use of newspapers and radio may reflect literacy barriers and changing media consumption patterns (18).

The findings of this study reveal that a majority of parents demonstrated good (56.7%) or average (43.3%) knowledge regarding autism, with no participants falling into the poor or excellent categories. This moderate level of awareness aligns with previous studies conducted in India and other low- and middle-income countries, where parental knowledge about autism remains limited but is gradually improving due to increased awareness campaigns and access to digital media (19).

The overall knowledge score of 53.7% suggests that while parents are aware of basic features of autism, there may be gaps in understanding more nuanced aspects such as early signs, intervention strategies, and long-term management (20). Similar trends were observed in a study by Alawad et al. (2024), where 76.8% of parents had good knowledge, but misconceptions about causes and treatment persisted (21).

In terms of attitude, the results are encouraging—80% of parents had a positive attitude, and 20% had a highly positive attitude, with none expressing negative views. This reflects a growing societal shift toward acceptance and inclusion of children with autism, supported by findings from Rao and Beidel (2009), who emphasized that positive parental attitudes are often shaped by exposure to accurate information and supportive community environments (22).

The association analysis revealed that age, education, and area of residence were significantly associated with knowledge levels. This is consistent with findings from Bashir et al. (2020), who reported that older and more educated parents, particularly those in urban areas, tend to have better awareness

and more proactive attitudes toward autism management. Conversely, variables such as gender, religion, family type, number of children, occupation, and income showed no significant association, suggesting that knowledge dissemination efforts should be inclusive and not limited to specific demographic groups (23).

These findings underscore the importance of targeted educational interventions, especially in rural areas and among younger or less-educated parents. Health education programs, community workshops, and culturally adapted materials can play a pivotal role in enhancing both knowledge and attitudes, ultimately leading to better outcomes for children with autism (24).

Conclusion

The study concludes that parents of children with autism possess a moderate to good level of knowledge and demonstrate predominantly positive attitudes toward their children's condition. This reflects growing awareness and acceptance, particularly among parents with higher education and those residing in urban areas. The significant association between knowledge and variables such as age, education, and area of residence highlights the need for targeted educational interventions. These findings underscore the importance of integrating parent-focused awareness programs into nursing practice, administrative planning, educational outreach, and future research to further strengthen support systems for families of children with autism.

Recommendations

The study recommends the following research:

- Future studies should expand the sample size using probability sampling techniques and include multiple centers from diverse geographic regions to enhance representativeness and reduce selection bias.
- Researchers are encouraged to incorporate qualitative methods, such as interviews, to explore in-depth parental perceptions, while also designing structured awareness programs and conducting longitudinal studies to evaluate the lasting impact of educational interventions.

Limitations

- Small sample size (n=30) limits generalizability to broader populations.
- Non-probability purposive sampling may be focused on selection bias.
- The single-centre study conducted in one rehabilitation centre limits geographic and cultural diversity.
- Self-reported questionnaires may be subject to social desirability bias.
- Cross-sectional design prevents assessment of changes over time or causal relationships.

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