

# An Analysis of Effectiveness of Structured Teaching Programme for Parents of Autism Children Regarding the Conceptual Teaching on Home Care Management

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## Abstract

The present study was conducted in selected autism center Chennai. An Experimental Research Design before and after without control group was used in this study, the 40 samples were selected by using probability simple random sampling technique. Structured teaching programme on home care management of autistic children intervention was given for experimental group. The study findings revealed that the obtained 't' value is 26.490 for pre and posttest parents level of knowledge was significant at  $p < 0.001$  level. It was concluded that the structured teaching programme intervention was effective in increasing the parent's level of knowledge about the home care management of autistic children.

**Keywords:** Psychiatry • Communication • Autism • Children

## Introduction

An important antecedent to the specialty of child psychiatry was the social recognition of childhood as a special phase of life with its own developmental stages, starting with the neonate and eventually extending through adolescence. Naturally, some babies fail to develop and acquire milestones like normal children. These conditions, in which there is a significant deficit or delay in the development of various mental functions from early childhood, are called developmental disabilities [1-3]. Birthing is the most divine initiation to spirituality a woman can have. Birth of a child is a special gift of every parent. Irrespective of the sex of the child, each parent wants his or her child to be physically and developmentally perfect [4]. Often some children have a temporary or permanent physical or mental disability. The birth of a child with a defect or the discovery that a child has a disability can have profound effects on the family [5]. Developmental disorders are occurred due to the non-progressive neurodevelopment which includes disorder of speech and language. They are various disorder of psychological development like mental retardation, Asperger's syndrome, Rett's syndrome. Among those autism is chronic developmental disorder [6].

Autism is a chronic and organic non-progressive neurodevelopment disorder with a unique triad of impairment in socialization, communication and behavior. It is characterized by a withdrawal of the child into the self and into a fantasy world of his or her own creation [7]. The prevalence of autism spectrum disorders is about 1 in 150 children. It occurs four to five times more often in boys than in girls. Onset of the disorder occurs before age 3, and in most cases it runs a chronic course, with symptoms persisting into adulthood. Autism Spectrum Disorders (ASDs) are pervasive neurodevelopment disorders, diagnosed in early childhood when acquired skills are lost or the acquisition of new skills becomes delayed [8]. ASDs are associated with varying degrees of dysfunctional communication and social skills, in addition to repetitive and stereotypic behaviors. Autism is a pervasive developmental disorder of

uncertain origin that begins roughly by first 3 years of life [9,10]. Extreme withdrawal, lack of social behavior, severe language problems, attentional deficits and presence of bizarre behaviours are the core symptoms of autism [11-15].

Autistic children require intensive and highly structured special education from as early as the child is able to tolerate a school routine. Given the challenges involved in teaching, children with autism, a classroom setting with a minimal student to teacher ratio is usually essential. For the more impaired children, a typical hierarchy of priorities should include the ability to (1) tolerate individual adult guidance in performing tasks, (2) consistently follow a daily routine, (3) develop communication intent and communication means, and (4) move from associative to conceptual learning. Learning should take place in an environment that minimizes distractions (e.g., nearby windows, richly decorated walls); for the more challenged children, individual workstations and forceful adult intrusion may be necessary. Children with autism must be helped to generalize skills, for example, using new words acquired at home as well as in school [15-17]. The present study aimed to analyze the parent's level of knowledge about the home care management of children with autism disorder and to evaluate the effectiveness of structured teaching programme on home care management on autism among parents with autistic children.

## Methodology

The target population of the present study includes parents with autistic children admitted their children. The sample size for the present study is 40 numbers and the parents who admitted their autistic children were randomly selected and informed written consent was obtained. The following exclusion criteria were used for the study. Temporary care giver (1 or 2 days) will not be included, Parents those who have chronic physical and mental illness. Parents those who have previously exposed to education program regarding the intervention were excluded. The demographic data consists of 10 items seeking information about the parents and children age, sex, religion, and parent's educational status, occupational status, family type, marital status, area of residence. Any other physical illness during childhood period was recorded. The semi-structured questionnaire was also use for the study.

The data was collected from each sample as follows. As a pretest, the investigator assessed the parent's level of knowledge about the home care management of autism by using the semi-structured questionnaire with interview technique. After 3 days parents with autistic children in the experimental group were undergone the structured teaching programme about the home care management of autism. The parents were asked their

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**Received:** 27 September 2021; **Accepted:** 11 October 2021; **Published:** 18 October 2021

doubts regarding the home care management of autism to investigator. The investigator clarified their doubts. The investigator assessed the effectiveness of structured teaching programme on home care management of autism by using the semi-structured questionnaire with interview technique.

The data related to demographic variables were analyzed by using descriptive measures (frequency and percentage). The parents level of knowledge about the home care management of autism during before and after the structure teaching programme by using paired t test. The effectiveness of structured teaching programme on home care management of autism was analyzed by paired't' test. To associate the level of knowledge on home care management on autism with selected demographic variables were analyzed by using inferential statistics (chi square test).

## Results

Regarding gender of the parents with autistic children are almost female 40 (100%) were involved in caring the autistic children. It is evident from above that the genders of the parents with autistic children almost all were females 40 (100%) because of females rates are high to take care of children in home when compare to the male and also majority respondents are belongs to the occupational status home maker. With regard to the religion, highest contribution is seen among Hindu's 36 (90%) followed by Christians 4 (10%) and there is no participants from Muslim religion.

Table 1 showed the frequency distribution of the parents with autistic children according to their demographic variables. The frequency and distribution of the parents with autistic children according to their age shows that the majority of the parents with autistic children belongs to the age group between to 31 to 40 years 31 (78%) and the second highest distribution in the age group 18 to 30 years 5 (12%) and the least distribution of parents with autistic children between the age group between 41 to 50 years 4 (10%). With regard to educational status, parents with autistic children were more than one third of the parents 15 (37.5%) were educated up to primary level and the next is high school with 13 (32.5%). Remaining parents were educated up to graduation and above with 9 (22.5%) and least participants belongs to illiterate 3 (7.5%). Occupational status of the parents revealed that most of them were home maker with a frequency of 25 (62%) and 8 (20%) were working in private sector. Remaining were working in government sector 6 (15%) and other (coolie) 1 (2.5%) respectively.

Majority of the respondents (80%) were living in nuclear family and remaining 8 (20%) living in joint family and there is no participants from extended family. Only one respondent (2.5%) belongs to separated category of marital status. The frequency distribution with respect to the area of residence shows a higher range in the urban area 25 (62.5%) in comparison to the rural area 15 (37.5%) (Table 1).

The religion of the respondents, in which Hindus occupies a greater contribution of 36 (90%) followed by Christians with 4 (10%) and there is no participants from Muslim religion because of their customs and beliefs (Table 2).

The history of occupational status of the parents with autistic children that, most of them were home maker with a frequency of 25 (62.5%) and 8 (20%) was working in private sector. Remaining 6 (15%) were government employer and coolie were 1 (2.5%) respectively. The majority (80%) of the autistic children belongs to the age group between to 6-10 years and the second highest distribution in the age group 11 to 15 years 8 (20%). Regarding gender of the autistic children, Very high majority (90%) of them was male and remaining (10%) were females. With regard to duration of illness, majority (97.5%) of them were having illness duration of more than 3 years.

The autistic children are almost above 4 years 39 (97.5%) and remaining 1 (2.5%) were 3 years of duration of illness.

The parents' levels of knowledge on home care management for children with autism during pre-test. More than half of the parents 21 (52.5%) have inadequate knowledge regarding home care management for children with

autism. About 16 (40%) of the parents have moderate level and only a few (7.5%) of them have adequate level of knowledge regarding home care management for children with autism. To test the parent's level of knowledge regarding home care management for children with autism the researcher developed questionnaires regarding home care management which has 30 items. Parents who have scored less than 10 were considered as inadequate, those who have scored between 10-20 were considered to be having moderate level and the scores above 20 were considered as adequate level of knowledge regarding home care management for children with autism.

Distribution of parents level of knowledge on home care management of autistic children among parents with autistic disorder during pre and posttest out of 40 samples, most of them 21 (52%) had inadequate knowledge, 16 (40%) had moderately adequate knowledge, and only few had adequate knowledge about 3 (7.5%) in pretest and after the structured teaching programme posttest was carried over by using semi structured questionnaire. In the post test most of them had adequate knowledge 34 (85%), minority of them had moderately adequate knowledge and none of them had inadequate knowledge. It was inferred that most of the parents had inadequate knowledge in pretest, after the structured teaching programme to the parents achieved adequate level of

**Table 1.** Frequencies and percentage distribution of the parents with autistic children according to their demographic variables.

Sl.No	Demographic variables	f (N=40)	%
1	Age in years	21-30Years	5 12
		31-40 Years	31 78
		41-50 Years	4 10
2	Gender	Male	- -
		Female	40 100
3	Religion	Hindu	- -
		Christian	36 90
		Muslim	4 10
4	Educational status	Illiterate	3 7.5
		Primary school	15 37.5
		High school	13 32.5
		Graduation & above	9 22.5
5	Occupational status	Home maker	25 62.5
		Private sector	8 20
		Government Sector	6 15
6	Type of family	Coolie	1 2.5
		Nuclear Family	32 80
		Joint Family	8 20
		Extended	- -
7	Marital status	Married	39 97.5
		Separated	1 2.5
		Widow	- -
8	Residence	Rural	15 37.5
		Urban	25 62.5

**Table 2.** Frequency and percentage distribution of the parents with autistic children according to their religion (N=40).

Sl/No	Religion	Frequency (N)	Percentage (%)
1	Hindu	36	90
2	Christian	4	10
3	Muslim	--	--

knowledge.

The effectiveness of structured teaching programme on home care management of autistic children in that pretest mean parents level of knowledge were 11.40 and the standard deviation were 3.241. Comparatively the posttest mean values were 25.78 and the standard deviations were 2.557, finally the mean differences were calculated the value was 39 from that mean difference the 'p' value was obtained that was 0.0001. Finally concluded that 'p' value < 0.001 level. Hence there was significant difference between mean scores of pre-test and posttest parent level of knowledge. Hence it proved that  $H_0$  hypothesis were rejected.

The association of parents' level of knowledge on home care management of autistic children among parents with autistic children. With regards to education, 3 parents with autistic children were illiterate, 2 (5%) had inadequate knowledge, 1 (2.5%) had moderately adequate knowledge and 13 parents with autistic children were studied upto primary level about 10 (25%) had inadequate knowledge, 3 (7.5%) had moderately adequate knowledge and 15 parents with autistic children were studied upto higher secondary, about 9 (22.5%) had inadequate knowledge, 5 (12.5%) had moderately adequate knowledge, 1 (2.5) had adequate knowledge and 9 parents educated to graduation and above in this were about 7 (17.5%) had moderately adequate knowledge, only 2 (5%) of them had adequate knowledge about the home care management of autistic children. The obtained  $\chi^2$  value was 18.930 and  $p=0.004$ . It was significant at  $p<0.05$  level. It inferred that there is a significant association between knowledge on home care management of autistic children with their education status.

Association of knowledge on home care management of autistic children among parents with autistic children with their occupational status. With regards to occupation about 25 parents with autistic children were home maker among those 18 (45%) majority of home maker had inadequate knowledge, about 6 (15%) were had moderately adequate knowledge and only one 1 (2.5%) had adequate knowledge and 8 parents were working under private sectors among those about 2 (5%) had inadequate knowledge, 4 (10%) had moderately adequate knowledge, 2 (5%) had adequate knowledge and 6 parents with autistic children were working in government job among those parents about 6 (15%) had moderately adequate knowledge, none of them had inadequate and adequate knowledge and remaining 1 (2.5%) with autistic children parents working in other occupation like agriculturist, coolie etc. had inadequate knowledge. The obtained  $\chi^2$  value was 18.343 and  $p=0.005$ . It was significant at  $p<0.05$  level. It was inferred that there is a significant association between knowledge level and occupation.

## Discussion

The semi structured questionnaire with interview technique was used to assess effectiveness of structured teaching programme on parent's knowledge about the home care management of children with autism disorder. The response was analyzed through descriptive statistics (frequency and percentage) and inferential statistics (chi square test). This chapter attempts to discuss the findings of the study as per the objectives. The frequency and distribution of the parents with autistic children according to their age shows that the majority of the parents with autistic children belongs to the age group between to 31 to 40 years 31 (78%) and the second highest distribution in the age group 18 to 30 years 5 (12%) and the least distribution of parents with autistic children between the age group between 41 to 50 years 4 (10%). Regarding gender of the parents with autistic children are almost female 40 (100%) were involved in caring the autistic children. there was a significant association between the level knowledge and their selected demographic variables like parents' educational status and occupational status. Hence hypotheses  $H_2$  are retained for the number of parents.

Analyzing in respect to the religion highest contribution is seen among Hindu's 36 (90%) followed by Christians 4 (10%) and there is no participants from Muslim religion. Regarding the analysis of the educational status of the parents with autistic children were more than one third of the parents 15

(37.5%) were educated up to primary level and the next is high school with 13 (32.5%). Remaining parents were educated up to graduation and above with 9 (22.5%) and least participants belongs to illiterate 3 (7.5%).

In history of occupational status of the parents revealed that, most of them were home maker with a frequency of 25 (62%) and 8 (20%) were working in private sector. Remaining parents were working in government sector 6 (15%) and coolie (2.5%) respectively. Next category is the type of family shows that 32 (80%) were living in nuclear family and remaining 8 (20%) living in joint family and there is no participants from extended family. According to the marital status almost all the parents are married showing a frequency distribution of 39 (97.5 %) and only one parent belongs to separate with frequency of 1 (2.5%). The frequency distribution in respect to the area of residence shows a higher range in the urban area 25 (62.5%) in comparison to the rural area 15 (37.5%). The first objective of the present study was to assess the parent's level of knowledge about the home care management of children with autism disorder.

The present study findings revealed that, out of 40 samples most of them 21 (52%) had inadequate knowledge, 16 (40%) had moderately adequate knowledge, and only few had adequate knowledge about 3 (7.5%) in pretest and after the structured teaching programme posttest was carried over by using semi structured questionnaire. In the post test most of them had adequate knowledge 34 (85%), minority of them had moderately adequate knowledge and none of them had inadequate knowledge. The second objective was to evaluate the effectiveness of structured teaching programme on home care management on autism among parents of autistic children.

The study revealed that the mean of pretest was 11.40 and posttest was 25.78, it was higher than the pretest. The standard deviation of pretest knowledge score 3.241 and posttest knowledge score 2.557. The obtained 't' value was 26.49 and 'p' value was 0.0001. It was highly significant at  $p<0.001\%$  level. Hence the stated hypothesis is rejected. The findings were supported by Ozonoff S, conducted a study to assess the effectiveness of home care program intervention for young children with autism at USA. Parents were taught how to work with their preschool autistic in home settings. They have taken two group each consisting of 11 subjects. The treatment group was provided with approximately 4 months of home programming and was tested before and after the intervention with the Psycho educational Profile-Revised (PEP-R). The control group did not receive the treatment but was tested at the same 4-month interval. The groups were matched on age, pre-test PEP-R scores, severity of autism, and time to follow-up. Results demonstrated that children in the treatment group improved significantly more than those in the control group on the PEP-R scores.

The third objective was to find out the association between the parents level of knowledge on home care management on autism with selected demographic variables. This deals with the analysis and interpretation of the data regarding their association between the levels of knowledge on home care management on autism with selected demographic variables. Using Chi square test findings revealed that there was a significant association between the level of knowledge and their selected demographic variables like parents' educational status and occupation status.

With respect to the parents educational status was significant with  $\chi^2=18.930$  and  $p=0.004$  at  $p<0.05$ . Therefore it was inferred that there was significant association between the parents level of knowledge about the home care management of autistic children with their parents education status. Data on the parents' level of knowledge about the home care management of autistic children revealed a significant association with their parents occupational status was significant with  $\chi^2=18.343$  and  $p=0.005$  at  $p<0.05$  It was inferred that there was significant association between the parents' level of knowledge and their occupational status. Hence hypothesis  $H_0$  is rejected.

## Conclusion

In this present study effectiveness of structured teaching programme is tested by interacted elements such as input, throughput and output. From the feedback efficiency of the input, structured teaching programme regarding

home care management of autistic children among parents with autistic children will be assessed. The process of teaching as throughput assessed in terms of its effectiveness and improvement in the knowledge of parents with autistic children regarding home care management of autistic children.

## Conflict of Interest

Authors declared there is no conflict of interest.

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**How to cite this article:** Nathiya and AR Bharathi. "An Analysis of Effectiveness of Structured Teaching Programme for Parents of Autism Children Regarding the Conceptual Teaching on Home Care Management." *J Child Adolesc Behav* 9 (2021): 417.