



## **Assessment of the Level of Knowledge on Autism among the Mothers of Toddlers in Selected Village, Kanchipuram District, Tamil Nadu, India**

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### **Authors' contributions**

*This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.*

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## **ABSTRACT**

**Background:** Autism is a developmental disorder characterized by difficulties with social interaction and communication and by restricted and repetitive behavior. Mothers of toddlers should have knowledge on Autism to identify the child in earlier age and to treat the child.

**Objectives:** The study aimed to assess the level of knowledge on autism among the mothers of toddlers. The objectives were to find out the level of knowledge on autism among the mothers and to find out the association between the level of knowledge on autism and selected demographic variables of the mothers of toddlers.

**Materials and Methods:** A non-experimental, descriptive study was conducted. The sampling technique was snow ball sampling technique with the sample of 50 mothers of toddlers and questionnaires were formulated, a structured interview schedule was used to assess the level of knowledge on autism among the mothers of toddlers. Descriptive and inferential statistics were used to analyze the collected data. The data collection procedure was done for period of 2 weeks. The study was initiated after obtaining prior permission from the concern authorities.

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**Results:** The findings of this study revealed that 44% of the mothers of toddlers had inadequate knowledge, 44% had moderately adequate knowledge and only 2% had adequate knowledge on autism. There was significant association between level of knowledge and demographic variables such as age, occupation and previous knowledge on Autism of mothers of toddlers.

*Keywords: Knowledge; autism; mothers of toddlers.*

## 1. INTRODUCTION

Autism is a developmental disorder characterized by difficulties with social interaction and communication, and by restricted and repetitive behavior. Parents often notice signs during the first three years of their child's life [1-2].

These signs often develop gradually, though some children with autism experience worsening in their communication and social skills after reaching developmental milestones at a normal pace [3].

Autism is a lifelong, nonprogressive neurological disorder typically appearing before the age of three years. The word "autism" means a developmental disability significantly affecting verbal and non-verbal communication and social interaction [4,5].

Mostly mothers were not much aware on the signs and symptoms of the Autism, unless they have been or seen such kids. The mothers are the prime caretaker to observe each and every small progress in the developmental milestones.

## 2. NEED FOR THE STUDY

In 2013 worldwide, autism is estimated to affect 21.7 million people. Recent estimated prevalence of Autism Spectrum Disorder in India ranges from 0.15% to 1.01% in various studies, depending on the screening method used, and the areas surveyed. In the INCLIN study, the prevalence of ASD (then termed as Pervasive Developmental Disorder) was 1 in 125 in children 3-6 years and 1 in 85 in children 6-9 years of age. 10 million children likely to suffer from autism in India 1- 1.5 % or 1 in 66 children between ages 2 and 9 are affected 1 in 500 children was the estimate until now. It occurs four to five times more often in boys than girls [6]. The sufferers not only the child and but also the family. It also has direct and indirect cost implications on the country that are incurred in

providing health care, support for education, and rehabilitative services [7].

The aim of the study as follows: Mothers are the prime care taker during this toddler period, but most of the autism kids were diagnosed after they cross the toddler period. Mothers should have knowledge regarding autism to understand the difference between a normal child and autistic child. This will help them to take up consultation for early diagnosis and for further treatment.

## 2.1 Statement of the Problem

A descriptive study to assess the level of knowledge on Autism among the mothers of toddlers in Poonjeri village, Kanchipuram district, Tamil Nadu, India.

## 3. OBEJECTIVES OF THE STUDY

1. To assess the level of knowledge on autism among the mothers of toddlers.
2. To find out the association between the level of knowledge on autism and selected demographic variables of the mothers of toddlers.

## 4. MATERIALS AND METHODS

**Research Approach:** Quantitative approach was adopted for the study.

**Research Design:** Non-experimental descriptiveresearch design was adopted to carry out the study.

**Research Setting:** The study was conducted in Poonjeri village, Kanchipuram istrict, Tamil Nadu, India.

**Population:** The population of the study were mothers of toddlers residing in selected community setting, Kanchipuram District, Tamil Nadu, India.

**Sampling Technique:** Snow ball sampling technique was used to selected the study participants.

#### 4.1 Selection Criteria

##### 4.1.1 Inclusion Criteria

- The mothers who were having children in the age of 1 -3 Years
- The mothers of toddlers who were available at the time of data collection.
- The mothers who were willing to participate.
- The mothers who can understand and speak Tamil.

##### 4.1.2 Exclusion Criteria

- The mothers those who were not having toddlers / children.
- The mothers with toddlers on treatment for disability disorders.

#### 4.2 Selection and Development of the Study Instrument

##### 4.2.1 Section - A

Self - Structured tool consists of demographic variables such as age, religion, educational qualification, occupation, number of children, history of Autism in the family and previous knowledge on Autism of mothers of toddlers.

##### 4.2.2 Section - B

Structured Interview schedule was used to assess the level of knowledge regarding autism among mothers of toddlers which consists of 20 multiple choice questions with 4 options among which one was correct option.

#### 4.3 Scoring Interpretation

**Table 1. Score grading for testing the level of Knowledge**

Score	Percentage	Level of knowledge
0-6	0 - 30%	Inadequate
07-13	31 - 65%	Moderately adequate
14-20	66 -100%	Adequate

#### 4.4 Data Collection Procedure

The researcher conducted a personal interview to collect personal information and their level of knowledge on Autism using Structured Interview schedule among mothers of Toddlers.Data collection for the period of 2 weeks with prior permission and after getting written consent participants for the study.

#### 4.5 Data Analysis

Descriptive statistics like frequency and percentage were used. Inferential statistical like mean, standard deviation and chi-square test also used to analyze the data.

### 5. RESULTS AND DISCUSSION

The results states that majority of mothers of toddlers (76%) were in the age group of 17-20 years, majority of mothers belong to Hindu religion (70%), more than half of the mothers have higher secondary educational qualification (54%), Majority of mothers have two children (66%), most of the mothers were house wives (88%), no family history of Autism reported in their family (100%) and nearly half of the mothers(43%) have no previous knowledge on Autism.

**Table 2. Mean and Standard Deviation of level of knowledge on Autism among mothers of toddlers**

S. No	Level of knowledge on autism	Number of mothers of toddlers	Total number of questions	Score range	F	%	Mean	SD
1	Adequate			14-20	1	2%		
2	Moderate	50	20	07 - 13	27	54%	6.82	2.76
3	Inadequate			0 - 6	22	44%		

**Table 3. Association of demographic variables of mothers of toddlers with their level knowledge on Autism**

Demographic variables	Categories	Level of knowledge on Autism			P value
		Inadequate	Moderate	Adequate	
<b>Age of the mothers of toddlers</b>	17 - 20 years	15	23	0	0.012* (Significant)
	21 - 25 years	2	0	0	
	26 - 35 years	3	2	1	
	36 years & above	2	2	0	
<b>Religion</b>	Hindu	13	21	1	0.205 (Not Significant)
	Christian	8	6	0	
	Muslim	1	0	0	
<b>Educational qualification</b>	Primary Education	8	8	0	0.570 (Not Significant)
	High school\ higher school education	11	15	1	
<b>Occupation</b>	Graduation and Above	3	4	0	0.042* (Significant)
	Home maker	19	24	0	
<b>No of children</b>	Private employee	3	3	1	0.334 (Not Significant)
	One	6	10	1	
	Two	15	17	1	
<b>Previous Knowledge on Autism</b>	More than Two	0	0	1	0.014* (Significant)
	Yes	5	2	1	
	No	17	25	0	

Table 3 The study findings revealed that there was significant association between level of knowledge and demographic variables such as age, occupation and previous knowledge on Autism of mothers of toddlers. There was no significant association between religion, educational qualification, number of children and the demographic of the mothers of toddlers at  $p < 0.05$  level.

## 6. CONCLUSION AND RECOMMENDATION

The findings of this study revealed that 44% of the mothers of toddlers had inadequate knowledge, 44% had moderately adequate knowledge and only 2% had adequate knowledge on autism. The mothers were young (17-20 years) and educated to maximum of higher secondary level, the knowledge of demographic data reveals that mothers had previous knowledge on Autism from internet sources by the use of mobile phones. The researcher recommended that the knowledge on autism among the infant and toddler's mothers enable them for early identification and appropriate treatment, there by the further complications can be prevented. (Mental impairment)

## CONSENT AND ETHICAL APPROVAL

The research proposal was approved by the Department of Mental Health Nursing, Chettinad College of Nursing. Ethical Clearance obtained from Institutional Human Ethics Committee, Chettinad Academy of Research & Education. The study purpose was explained to the mothers of the toddlers and an informed consent obtained from them in written prior to the data collection.

## COMPETING INTERESTS

Authors have declared that no competing interests exist.

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