Knowledge and Attitude Towards Autism Among Preschool Teachers In Kerala

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ABSTRACT

Childhood language developmental disorder (autism spectrum disorder - ASD) is a heterogeneous developmental neurological disorder characterized by deficits in social communication and social interactions as well as stereotyped, repetitive behavior and restricted interests (Diagnostic and statistical manual of mental disorders – V (DSM – V), 2013). The aim of the present study was to assess the knowledge and attitudes of preschool teachers towards autism. A total of 50 preschool teachers including males and females participated in the present study. A set of 20 questions were prepared and used. According to the results of the present study, even though preschool instructors have a high level of information about autism, the attitude they have toward children with autism is uninformed, compared to the scores of teachers' knowledge and attitudes.

Key words: autism, teachers, preschool, knowledge and attitude

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I. INTRODUCTION

Childhood language developmental disorder (autism spectrum disorder - ASD) is a heterogeneous developmental neurological disorder characterized by deficits in social communication and social interactions as well as stereotyped, repetitive behavior and restricted interests (Diagnostic and statistical manual of mental disorders – V (DSM – V), 2013).

It is generally diagnosed based on the presence of two major symptoms, namely deficits in social communication and restricted and repetitive interests or behaviors. Individuals with ASD will exhibit these symptoms beginning in early childhood.

Kanner (1972) was the first to describe autism, with a clinical description of 11 children who displayed intense loneliness from birth and did not respond to anything from the outside world that came to them. He referred to autism-related behaviors such as obsessiveness, stereotype and echolalia as childhood schizophrenia. ASD was not recognized as a biologically based individual development disorder until the 1980s. In the early 1980s, research discovered that ASD was strongly heritable and linked to other genetic syndromes providing support for a genetic etiology of ASD and fueling the concept of autism as a distinct neurodevelopmental disorder. Autism was renamed infantile autism in 1980, autism disorder in 1987, and, more recently, autism or the umbrella term 'ASD' from Kanner's definition of childhood or early onset schizophrenia.

Autism management requires a team of professionals who have all received specialized training in autism management. And, for management to be effective, rehabilitation must begin early because child age plays a significant role in cognitive gains in response to intervention, implying that the younger the child at the start of early intervention, the better the response in the cognitive domain. As a result, intervention must begin at a very young age, when brain plasticity causes changes in central nervous system circuits (Harris and Handleman, 2000; Lovaas, 1987; Luiselli, Cannon, Ellis and Sisson, 2000; Turner and stone, 2007.

A significant amount of time is spent in finding the diagnosis, typically for an assessment to be completed and parents to make an informed decision about the management of their child for around 6 months, but there are various disorders that may share similar characteristics, making accurate identification difficult. ADHD, anxiety, bipolar disorder, inflammatory bowel disease, epilepsy, fragile-X syndrome, gender dysphoria, intellectual disability, neuro inflammation and immune disorder, nonverbal learning disorder, obsessive compulsive disorder (OCB), schizophrenia, sensory problems, sleep disorders, tuberous sclerosis, Tourette syndrome, and Tic disorders are just a few examples (Yuksel, Tarakçıoğlu and Kılıçoğlu, 2017).

Currently, assessment challenges are increasing, and an increase in the availability of dependable professional services is also required. Autism, for example, is becoming more common, according to various sources. According to the Centers for Disease Control and Prevention (CDC), it affects one out of every 59 children in 2018. ASD appears to be four to five times more common in boys than in girls. Some of the causes or risk factors are also becoming more common. Parents with a history of psychiatric disorders [Jokiranta, Brown and Heinimaa, 2013), parental age (Durkin, Maenner and Newschaffer, 2008), premature birth (33-week gestation), or low birth weight (>2500g), are associated with a twofold increased risk. Fetal

exposure to insecticides such as chlorpyrifos has been linked to lower infant body weight and length, as well as a delay in psychomotor development (Landrigan, 2010). Pregnant mothers' exposure to viral or bacterial infection, particularly during the first and second trimesters, promotes maternal immune activation and increases the risk of neuropsychiatric diseases, including ASD, in their children (by 13 percent) compared to children of unexpected mothers.

As a result, for each year of service delay, the number of beneficiaries in need of such services would increase significantly. As a result, there is a need to raise autism awareness among all segments of society. Understanding the prevalence of myths and information held by people who have a close relationship with children is important for providing an effective service delivery mechanism.

The disorder appears at birth or within the first two and a half years of life. Most children were still being diagnosed after the age of four, despite the fact that autism can be reliably diagnosed as early as the age of two. The children affected will appear perfectly normal, but they will spend their time engaging in deviant and disturbing behaviors that are significantly different from those of typical children. ASD can sometimes be detected in children as young as 18 months. An experienced professional may consider the diagnosis reliable by the age of two (Lord, Risi and DiLavore, 2006). Many children, however, do not receive a final diagnosis until they are much older. This delay suggests that children with ASD may not receive the necessary early intervention.

Early autism interventions have a significant long-term positive impact on symptoms and later skills (Reichow and Wolery, 2009). Because ASD is sometimes diagnosed in children before the age of two, some children with ASD whose development appears normal up to that point and begin to regress before or during the age of two (Zwaigenbaum, Bauman and Choueiri, 2015). There is compelling evidence that the increase in the number of children diagnosed or identified with these disorders is due to increased awareness, significant changes in diagnostic criteria, and improved diagnostic tools. However, in India, there is a lack of awareness and knowledge of these disorders among the general public, particularly in the health and education communities. Due to a lack of trained personnel and specialized centers, awareness is even lower in non-metropolitan areas. In India, approximately 2.3 million children have ASD (Shetty & Rai, 2014).

Unfortunately, developmental disabilities in children are not a health priority, and most teachers are not equipped to identify developmental disabilities. Knowledge and awareness among preschool teachers could play a key role in early identification of children with ASD. Screening and classifying ASD among millions of children is a logistical challenge for health workers; teachers are the people best equipped for this onerous mission. Teachers interact with students on a daily basis and are more likely to recognize and track subtle signs or symptoms.

There is a significant time lag between the recognition of autistic symptoms and the time of diagnosis, which frequently results in delays in diagnosis and treatment. One of the limitations of autism is that abnormal behavior occurs in episodes that may go unnoticed during a brief clinical observation. Teachers are an important part of a child's initial social circle, so their knowledge of the child could be critical for early identification of autistic children. Teachers play an important role in providing support services and advancing the educational progress of autistic children; thus, their perceptions of ASD are critical for better long-term outcome.

II. METHOD

- **2.1 Aim:** The aim of the study was to assess the knowledge and attitudes of pre-school teachers towards autism
- To assess the knowledge on ASD among preschool teachers in Kerala, using a semi structured survey method
- To assess the attitudes towards ASD among preschool teachers in Kerala, using a semi structured method
- Finding out if the school environment affects the level of ASD awareness
- The study was carried out in 2 phases.

2.2 Phase 1: Preparation of questionnaire

A set of 20 closed set (yes/no) questions were prepared in order to know the knowledge and attitude towards autism among preschool teachers. All these questions that were prepared were validated by 10 speech language pathologists who have been working in the field for more than 5 years. The corrections and suggestions given by SLP's were incorporated.

2.3 Phase II: Participants

A total of 50 preschool teachers including males and females participated in the present study.

2.4 Stimulus used: A closed set of 20 questions which was prepared and used.

- **2.5 Procedure:** The questionnaire was administered to pre-school teachers. Where the participants were asked to read and understand the questions and adequately and appropriately mark responses to the questions.
- **2.6 Analysis:** For each item, the response was recorded as yes or no and a credit point of one was assigned foryes and zero for no. Further data was statically analyzed for frequency and percentage.

III. RESULT AND DISCUSSION

The aim of the study was to assess the knowledge and attitude of preschool teachers towards autism. The result obtained was discussed below

3.1 Section.1 - Knowledge

The findings of preschool teachers' knowledge about ASD in Kerala are as follows. There were a total of 10 questions. For each question the respondents have to say yes or no. According to the questions, the choice differs between yes or no.

 Table 3.1:

 Table shows the knowledge of ASD in preschool teachers

Knowledge	Yes		N	No	
	Frequency	%	Frequency	%	
Are you aware of autism	50	100	0	0	
Do children with autism have a	27	54	23	46	
delay in language development					
Do children with autism have poor eye contact,					
attention span and name call respond with					
others	23	46	27	54	
Do children with autism show	25	50	25	50	
less peer group interaction					
Do children with autism showrepetitive behaviors					
like hand shaking, object swinging	27	54	23	46	
Do children with autism have goodsocial					
communication	31	62	19	38	
skills					
Do Children with autism preferto play in a group	25	50	25	50	
than alone					
Do you think special education instructors are					
required in the schools for children with					
autism?					
	38	76	12	24	
Do you think that autistic					
children are frequently hyperactiveand disobedient?	35	70	15	30	
Are you aware that the government provides					
additional services forchildren with special needs?					
	50	100	0	0	

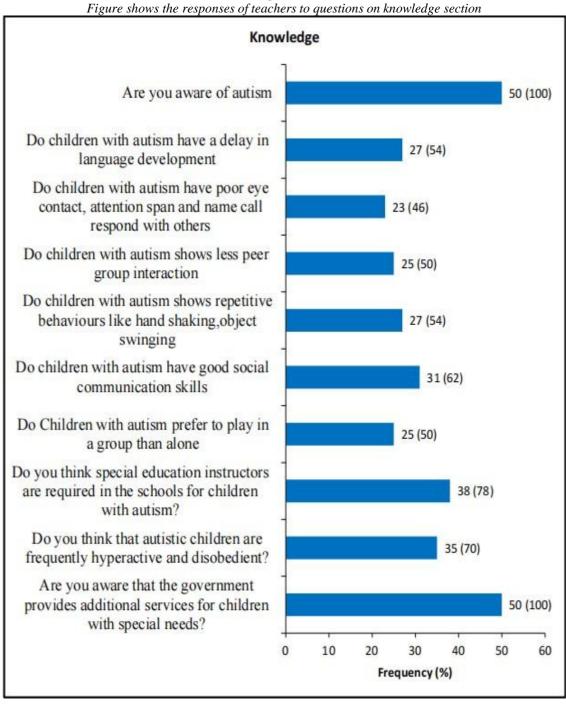


Figure 3.1Figure shows the responses of teachers to questions on knowledge section

Table 3.1 and figure 3.1 shows the findings of preschool teachers' knowledge about ASD.

Among the 50 participants,100% of the participants are aware of autism and the government policies regarding special needs children. Almost all the respondent choose the appropriate option. This question indicates a good level of knowledge among respondents'.

Most of the respondents (54%) accept that children with autism show repetitive behaviors and delay in language development and some of the respondents' disagree about it. This question shows a good level of awareness among respondents. Few of the respondents (46%) agreed that children with autism have poor eye contact, attention span and name call response with others while 54% of the respondents disagreed on it. In the long run, these responses infer that retaliation of teachers' lack of knowledge on these questions. Half of the respondents (50%) agreed that ASD kids have poor peer group interaction and prefer to play in a group than

alone. This question shows a good level of awareness among half of the respondents.

Majority of the respondents' (62%) disagreed about autistic children with good social communication skills and least of the respondents' agreed on it. So, this question indicates a good level of awareness among respondents. It is found that out of 50 participants, 38 (76%) of them agreed that special education instructors are required in the schools for children with autism. A least number of respondents' disagree with it. Most of the respondents' chose the appropriate option. Most of the respondents (70%) claim that the autistic children are frequently hyperactive and disobedient. Only a few numbers of respondents disagree with it. This shows a good level of knowledge among respondents'.

Section.2 - Attitude

The following are the results of attitude of preschool teachers in Kerala. There were a total of 10 questions. 10 questions were yes or no questions. The answer has to provide the responses appropriately.

Table 3.2: AttitudeTable shows the attitude of ASD in preschool teachers

Attitude	Yes		No	
	Frequency	%	Frequency	%
Do you believe that poor				
parental care can cause autismamong children?	35	70	15	30
Do you think higher educationaffects the children with				
autism?	17	34	33	66
Are you aware that autism can be curable with early diagnosis andappropriate intervention?	26	52	24	48
Is there an opportunity for a childto interact with autistic children in classes?	27	54	23	46
Do you show an interest in assisting the child with autism to do his/her activities in classes?	50	10 0	0	0
Do you provide enoughopportunities for a child with autism like other children?	50	10 0	0	0
Do you think the characteristics of an autistic child will reduce as he/shegets older?	17	34	33	66
Children with autism should	1 /	34	55	00
enter recognized schools forformal education.	18	36	32	64
Do you think all preschools should accommodate children withspecial needs?		1 88	6	12
Do you think autistic children should be given priority in special schools rather than normal schools?		3 16	42	84

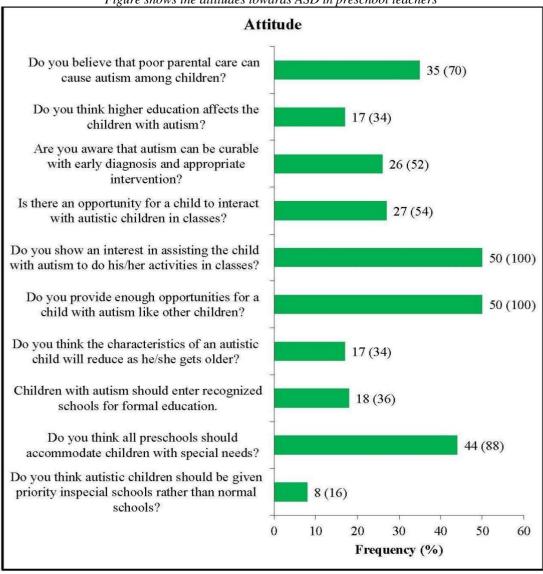


Figure 3.2
Figure shows the attitudes towards ASD in preschool teachers

From the above figure, it shows that all the respondent (100%) responded that they will assist a child with autism to do their activities and they give enough opportunities for a child with autism like other children.

The majority of the respondents (88%) said that all preschools should accommodate children with special needs and few of the respondents (12%) disagreed on it. Most of the respondents (70%) agreed that poor parental care can cause autism among children although few of them (30%) disagreed on it. More than half of the respondents (54%) said that there is an opportunity for a child to interact with autistic children in classes andfew of the participants (46%) disagreed on it. A high number of respondents (52%) believed that autism can be curable with early diagnosis and appropriate intervention while few of them (48%) claimed no for the questions. The majority of the respondents (64%) were against on children with autism entering recognized schools for formal education and only a few (36%) of them were responding by supporting the question

A few respondents (34%) said that higher education affects the children with autism and the characteristics of an autistic child will reduce as he/she gets older, the majority of the respondents (66%) disagreed with it. Most of the respondents (84%) said that autistic children should be given priority in special schools rather than normal schools and only few of them (16%) disagreed on it.

IV. DISCUSSION

4.1 Section - Knowledge

Similar results are indicated by the survey responses from preschool teachers regarding their knowledge of ASD. The majority of preschool teachers are found to be familiar with the symptoms of ASD, which include delays in language development, repetitive behaviors, poor social skills and poor peer group interaction.

Studies supporting the statement shows, it has been discovered that kids with ASD are less engaged during free play (Kemp, Kishida, Carter and Sweller, 2013). Studies here shows that, teachers are most familiar with the repetitive behaviors, poor response to change, and lack of eye contact that are symptoms of ASD, while they are least familiar with the symptoms of intellectual impairment and playing with toys in ways other than the intended use of the toy.

Even though the majority of the preschool teachers were aware of autism, there are quite a few areas where preschool teachers lack in knowledge on ASD. It is prevalent not only across the communities, but also with schools and health providers. Ideally it is appropriate for any teacher to have reasonable knowledge and awareness on autism among preschoolers because it's found that there is an imminent increase of childrenwith autism respectively.

4.2 Section : Attitude

The success of educating children with ASD is significantly influenced by teachers' positive attitudes. When assessing the attitudes of preschool teachers, even though, the knowledge among teachers are highly efficient, attitude seems to be not barely enough as they are not providing equal opportunity for ASD kids just like that for normal children. This situation may occur as they lack opportunities that belong to this background. These opportunities can be benefited through different training sessions. These sessions help the upcoming teachers change the attitude towards ASD children.

ASD students who are enrolled in general education classes have various favorable outcomes, including greater levels of friendship groups, social support, and developmentally more advanced individualized education plan goals than their peers in isolated settings. A tiny percentage of teachers opposed inclusive education because they believed autistic students might not react correctly to other students in the classroom and that it would be difficult to get the parents' permission for other students.

Preschool teachers have a high probability of identifying children's abnormalities, which allows them to determine the children's position and recommend them for the proper examination, which may result in early intervention services. Therefore, it is crucial to offer teachers a formal training session that will improve their personal qualities, such as their knowledge, attitude, feelings, skills, and perceptions of children with ASD, and that will enable them to refer these kids for further assessment as well as work with parents to access special services.

The current situation of the lack of positive attitude of teachers towards autism could also be due to less exposure of the disorder. Hence due to which there is a marked negative change in attitude among teachers towards children with ASD, especially in Kerala. The social situation of schools in Kerala includes lower chances of autistic children involved with the normal children. The majority of the parents whose children with ASD provide their children with appropriate intervention prior to initiation of academic session

V. SUMMARY AND CONCLUSION

A total of 50 teachers from mainstream schools in Kerala with more than 1 year of experience in the teaching field were included in the study. The faculties included both private and government schools. A questionnaire with knowledge and attitudes related questions were given to the preschool teachers for the study. As preschool teachers are trained in child development and have been working with many children every day, the preschools are an ideal setting for identifying children with ASD.

There is presently no cure for ASD, although research has shown that early detection and intervention can improve a child's development. ASD affects people of all racial, ethnic, and socioeconomic backgrounds (CDC, 2014). Early intervention helps autistic children achieve normal intellectual and educational functioning, improve their language and communication skills, and lessen the severity of their symptoms. However, there are several obstacles to early diagnosis, such as the parents' educational background, their race or ethnicity, and socioeconomic status.

A teacher's knowledge and training for working with children diagnosed with ASDs must be sufficient to help identify strategies or programs to help autistic children in their classrooms to be academically and socially successful. According to the observation that a general education teacher will teach at least one child with autism each semester Goodman and Williams, 2007).

According to the results of the current study, even though preschool instructors have high level of information about autism, the attitude they have toward children with autism is uninformed, compared to the scores of teachers' knowledge and attitudes.

Most educators have been shown to be aware of the signs of ASD, which include delayed language development, repetitive behaviors, poor social skills, and poor peer interaction. However, most of them are not aware of the signs of ASD, which include poor communication skills, inability to maintain eye contact, and attention span issues. When assessing the attitudes of teachers, seems to be not barely enough as they are not providing equal opportunity for ASD kids just like that of normal children. This chance of situation may occur as they lack the opportunity that belongs to this background. These opportunities can be benefited through different training sessions. These sessions help the upcoming teachers change the attitudetowards ASD children.

The society of today has been adapting to individuals or children with autism. Children with autism like normal children require equal attention. However, there is plenty of misconceptions in children with autism. Just like other professionals, misconceptions were gradually seen among teachers regarding these children. Few of them visualize autistic children as having a mental disorder and would prefer that the autistic children have their educational environment in a special school setup rather than a normal school setup. Eventhough early intervention has been provided for children with autism, there was a misconception in the thought process of professionals which was not helpful in bringing the ASD children back to their normal behaviors. This data collection has helped to understand the misconceptions that are presented in teachers.

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