



AWARENESS OF AUTISM SPECTRUM DISORDER IN SPECIAL EDUCATION AND GENERAL EDUCATION TEACHERS

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ABSTRACT

BACKGROUND: Autism is a lifelong Neuro-developmental disorder which affects the child ability to make social interaction, communication, and increase abnormal behaviours. Many professionals including teachers are not well aware of the appropriate diagnostic criteria and they have misconceptions regarding autism which compromise the early diagnosis of Autism.

OBJECTIVES: The objective of the study was to determine the awareness of the teachers of special and general education regarding the autism spectrum disorder.

METHODS: This study was a cross-sectional survey. The data was obtained from private and governmental general education schools in Lahore, Punjab, including specialized education centres. The total number of participants was 344; a standardized "Knowledge of the autism questionnaire" was distributed among special educators in individual education centres and teachers in general

education schools who had one or more experience. The data was analysed in SPSS.

RESULTS: The results show that special education teachers have a relatively greater awareness of autism rather than general education teachers i-e their highest score was 102 where as general education teachers had a score of 42.

CONCLUSION: It is concluded that general education teachers in the field have limited knowledge of autism due to the presence of various misunderstandings. They are not well trained and educated in this field. The result of the study shows that there should be continuing education for teachers, particularly general education teachers and health professionals in all disciplines concerning autism.

KEYWORD: Autism, Awareness, Knowledge, Questionnaire.

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INTRODUCTION

Autism is a lifelong Neuro-developmental disorder which affects the child ability to make social interaction, communication, and increase abnormal behaviours. At present autism is fast growing disability of children in all over the World. Current prevalence rate estimated in America is 1 in 50 amongst children. However, Autism

spectrum disorder is still known for the fact that it has no cure at all. Hence, it is known that early diagnosis of pervasive developmental disorder is needed for choosing better interventions and good results as evidence suggests that early intervention for the children having autism spectrum disorder helps to make progress in functioning of young children.(1) Nevertheless, ample knowledge about childhood autism among healthcare benefactors is

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important, in the same way special and general school teachers can also show fundamental part in early diagnosis of an autism spectrum disorder child, which can lead to further early treatment. Although, in Pakistan, autism is not diagnosed until the stage of three years and many of the children start going to school at that age so it is necessary to know the awareness of teachers regarding autism spectrum disorder diagnosis so that they can play their role in recognising autism spectrum disorder at earliest. (2, 3)

There are many so many initial symptoms which are shown as the age increase. These symptoms usually revolve around the social involvement, communication difficulties, including verbal and non-verbal, and repetitive behaviours. Social interaction in naturalistic environment could be problematic for children with autism spectrum disorders. In school they show grammatical errors and use inappropriate verses. They found it very challenging to interconnect their needs and requirements. They have problems in making and following easy directions, commands and questions. They misunderstand the real meaning of funniness, satire, and scorn.(4) Child psychologist and other physicians play a dynamic role by often being the first to contemplate such type of lifetime diagnosis. They also play a vital and important role in coordinating with the resources and then make proper referral of the patient for more appropriate further evaluation. Similarly, speech therapists are considered experts in speech and language and communication and accordingly play a serious role in screening, assessment, diagnosis and therapeutic intervention of autistics.(5, 6)

Previous study showed moderate level of awareness on the autism spectrum disorder between different types of hospital providers in the psychiatry department. Results showed that psychiatrist providing psychiatric facilities in hospitals as well as mental awareness people and child psychologists largely agreed on features prerequisite to diagnose autism. A review was directed in which included physicians (specialists, paediatricians, nervous system specialists and family doctors) and non-doctors (clinicians and language teachers). They utilized Knowledge of DSM-IV TR criteria for autistic disorder. Consequently, in different expert opinions a huge contrast was found in diagnosing autism. Non-physicians showed more knowledge about Autism diagnosis as compared to doctors.(7, 8)

Current study would help in developing the importance of awareness regarding autism spectrum disorder among special education and general education teachers.(9, 10) It is important for general education teachers to have

appropriate knowledge regarding ASD because in their career they might get a chance to deal with such children so they should have awareness regarding the signs and symptoms of ASD. However, numerous doctors and other professionals are giving their services to children having autism spectrum disorder.(11, 12)

So, the purpose of this study was to determine amongst the special education teachers and also the general teachers regarding the autism spectrum disorder.

MATERIAL & METHODS

This cross-sectional study was conducted at Government and Private Schools of Lahore, Punjab including special education centres. 344 special education (M.C.C) and general education teachers, having one or more than one-year experience, having 16 years of education, both male and female teachers would be included. Teachers who were the students of MS Special education were excluded. A standardized questionnaire "Knowledge about autism questionnaire" was used. Its reliability is 0.80. It consists of 32 questions related to the diagnosis, symptoms and treatment of the autism. (13)

DATA COLLECTION PROCEDURE

Data was gathered from the special and general education teachers whose teaching in special and general education schools of Lahore, Punjab. A standardized Questionnaire "Knowledge about Autism questionnaire" was used to collect descriptive information and was distributed among special and general school teachers and they were asked to fill the questionnaires. Some of the teachers filled the questionnaire themselves and they asked about anything they were not sure about. Few of the questionnaires were explained by the researcher and it filled accordingly.(14)

RESULTS

Out of 344 teachers, 15 were BA-Bed, 229 teachers had done MSc whereas 100 teachers were allocated after MS/MPhil. 149 teachers had 1-5 years' experience whereas 195 had more than 5 years of working experience. However, 158 special education teachers have worked with Autistic children and only 14 had no experience of dealing with an autistic child. Whereas 24 general education teachers had dealing with autism cases and 148 had no experience of working with an autism child.

The 126 education teachers responded that language delay is one of the obvious vital symptoms of autism spectrum disorder. While only 37 general education teachers agreed on this. It also shows that 30 special and 21 general education teachers responded that lack of eye contact is one of the obvious vital symptoms of autism spectrum disorder. 52 special and 30 general education teachers responded that



they need to be equal, resistance to change in routine is one of the noticeable significant symptoms of autism spectrum disorder. 71 special education teachers responded that the lack of social reactivity is one of the obvious vital symptoms of autism spectrum disorder. While only 12 general education teachers agreed on this. 67 special and 13 general education teachers responded that the lack of social reactivity is one of the noticeable significant symptoms of autism spectrum disorder. However, 50 special education teachers responded that the onset of symptoms of autism spectrum disorder before 36 months is one of the noticeable significant symptoms of autism spectrum disorder. While only 11 general education teachers agreed on this. 47 special and 11 general education teachers responded that concern for objects is one of the obvious vital symptoms of autism spectrum disorder as shown in **table 1**.

The **table 2a & 2b** shows knowledge about autism spectrum disorders among teachers. Out of 344, 164 special and 39 general education teachers responded that autism could occur in both mild and extreme forms; it is one of the noticeable significant symptoms of autism spectrum disorder.

47 special and 161 general education teachers responded that autistic children generally grow up to become schizophrenic adults. However, 161 special education teachers responded that autism is an emotional disorder, while only 49 general education teachers agreed with this.

138 special and 31 general education teachers responded that the withdrawal of autistic children is mainly due to the cold. Majority of special education teachers responded that autism is a rare condition in this country as compared to the West and there is a lack of awareness about autism among professionals. Many of special education teacher supposed that autism is a communication disorder and autistic children do not show social attachments not even with their parents. Special education teachers responded that parents counselling is an effective treatment of autism and both the teachers equally agreed that dietary intervention is one of the therapeutic options for autistic children.

The **table 3** shows that special education teachers have greater awareness about autism spectrum disorder rather than general education teachers. This difference shows that general education teachers need trainings to enhance their awareness.

Table 1: Behaviours/Characteristics					
Parameters	School	Helpful	Helpful but not necessary	Not Helpful	P-Value
Language Delays	Special Education	126	33	13	<0.01
	General Education	37	83	52	
Lack of eye contact	Special Education	30	79	63	<0.01
	General Education	21	63	88	
Need for repetitiveness, confrontation to make changes in daily routine	Special Education	52	48	72	<0.01
	General Education	30	97	45	
Peculiar speech characteristics	Special Education	43	89	40	<0.01
	General Education	20	57	95	



Lack of Social responsiveness	Special Education	71	52	49	<0.01
	General Education	12	92	68	
Rigid or stereotyped play activities	Special Education	67	44	61	<0.01
	General Education	13	73	86	
Early symptoms Before 3years	Special Education	50	87	35	<0.01
	General Education	11	90	70	
Stimming	Special Education	88	54	30	<0.01
	General Education	07	84	81	
Preoccupation with objects	Special Education	59	58	55	<0.01
	General Education	12	82	78	
Social interaction difficulties	Special Education	47	61	64	<0.01
	General Education	11	85	76	

Table 2a: Knowledge About Autism Spectrum Disorders

Parameters	School	Agree	Not sure	Disagree	P-Value
Autism can occur in mild as well as extreme forms	Special Education	164	7	1	<0.01
	General Education	39	86	47	
Autistic children usually grow up to be schizophrenic adults	Special Education	47	66	59	<0.01
	General Education	161	10	01	
Autism is an emotional disorder	Special Education	161	10	1	<0.01
	General Education	49	70	53	
Most Autistic children are also mentally retarded	Special Education	159	12	1	<0.01
	General Education	42	77	5	



It is difficult to distinguish between Autism and childhood schizophrenia	Special Education	158	13	1	<0.01
	General Education	49	71	52	
Autism occurs more commonly among higher socioeconomic and educational level	Special Education	147	24	1	<0.01
	General Education	40	67	65	
Autistic children's withdrawal is mostly due to cold, rejecting parents	Special Education	138	32	2	<0.01
	General Education	31	84	57	
Most autistic children have special talents or abilities	Special Education	132	39	1	<0.01
	General Education	61	73	38	
Autism is a rare condition in this country as compared with the West	Special Education	126	42	4	<0.01
	General Education	44	74	54	
Autism is under-recognized and often missed in general practice	Special Education	108	60	3	<0.01
	General Education	35	91	45	

Table 2b: Knowledge About Autism Spectrum Disorders

Parameters	School	Agree	Not sure	Disagree	P-Value
There is a lack of awareness regarding Autism among professionals	Special Education	106	62	4	<0.01
	General Education	56	68	8	
Autism is a communication disorder	Special Education	107	59	6	<0.01
	General Education	41	82	49	
Autistic children do not show social attachments, even to parents	Special Education	110	54	8	<0.01
	General Education	46	78	48	
It is impossible to tell if a child is Autistic before 4 years of age	Special Education	107	57	8	<0.01



	General Education	43	81	48	
Autism exists only in childhood	Special Education	117	48	7	<0.01
	General Education	42	70	60	
Even with early intervention, the prognosis for independent community	Special Education	112	52	8	<0.01
	General Education	38	77	57	
Autism is a developmental disorder	Special Education	115	49	8	<0.01
	General Education	55	66	51	
With the proper treatment, most autistic children eventually “outgrow” autism	Special Education	120	46	6	<0.01
	General Education	39	75	58	
Autism is a lifelong Condition	Special Education	117	48	7	<0.01
	General Education	42	70	60	
Parental counselling on training is one effective treatment of Autism	Special Education	122	43	7	<0.01
	General Education	45	65	62	
Autistic children are “untestable”	Special Education	48	77	47	<0.01
	General Education	123	42	7	
Dietary intervention is one of treatment options	Special Education	122	43	6	<0.01
	General Education	43	72	57	

Table 3: Mean of the Questionnaire

Specialty	Agree/ Helpful	Not Agree/ Helpful but not necessary	Disagree/ Not Helpful
Special Education Teachers	102.3	48.3	21
General Education Teachers	42	73.5	55.2

DISCUSSION

This study was to investigate and compare the awareness of



special and general education teachers regarding autism spectrum disorders. A standardized questionnaire "Knowledge about Autism questionnaire" was distributed among special and general school teachers to serve the purpose under the study.(14)

This study showed that special education teachers had more knowledge about autism as compared to general education teachers. One of the reasons of this could be the number of cases they actually encounter in schools. A special education teacher is working in a school of special needs and of course had a relative qualification according to the needs of a special need hence; they are working in a setup where probability of autism cases is much higher than a general education teacher who encounters autism cases rarely in their school setup. Similarly, general education teachers who are teaching above primary level there is very less probability of having a child with autism in their class. They may have students with behavioural issues but pure autism case is rare. Similar results had been showed in a sample of 72 educators which were evaluated regarding knowledge of Autism symptoms and diagnosis findings suggested that teachers in normal schools had generally inferior knowledge of Autism and had not as much of training than the exceptional educator's group. A general development was seen in teachers of both groups to not view children with Autism as they have any learning difficulties. (7) Another study was piloted, one of the few studies that examined the general knowledge of the general educators and special educators about Autism and their opinions about general goals. It was noticed that either group of teachers emphasised on the most common and difficult symptoms of Autism for example there sleeping. (8) Numerous doctors and other professionals including special educators and general educators are giving their services to kids having autism spectrum disorder. Consequences of numerous investigations from Pakistan have appeared most medicine experts are not very much aware, have wrong assumptions and less information with respect to early diagnosis of autism spectrum disorder. An investigation contrasting specialized curriculum instructor with general training educators found articulated contrasts between the two gatherings. For instance, general instruction educators communicated more requirements for incorporation preparing than a specialized curriculum instructor. This poor knowledge and attitude of healthcare experts brings about compromised early analysis and diagnosis of Autism which at that point proactively influences the long-haul diagnosis of Autism. Hence, results of the current study show that general education

teachers have limited awareness about of autism spectrum disorder than special education teacher. Such aspect has leads towards sound impacts on the fact that lack of knowledge and attitude towards healthcare factors are producing negative image of doctors and other professionals who form part of such process Autism spectrum and vice versa.(15, 16)

There is a need to enhance awareness among general education teachers regarding latest researches related to autism spectrum disorders. Further research should be conducted in private schools. Hence, more workshops and seminars, comprises of basic diagnostic awareness of autism and evidence-based researches in schools to enhance awareness among teachers of all fields. (17)

CONCLUSION

Conclusively, Special education teachers have more knowledge about the symptoms and treatment of autism spectrum disorders as compared to general education teachers whose teaching in Government schools of Lahore.

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