

Awareness of Autism Spectrum Disorder among Non Medical Students - A Survey

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ABSTRACT

Introduction: Autism Spectrum Disorder is a Neuro-developmental disorder that affects communication and social behavior. Examining the awareness of ASD in Non Medical students (arts and engineering students) would help in early recognition and improved support to affected families. Insufficient knowledge about ASD and inappropriate attitudes towards mental health services use may affect the efforts of early identification and intervention. Awareness is not to help raise funds to cure autism, rather the awareness involves in early identification and early diagnosis. Early diagnosis allows children to enroll in speech therapy or other programs that will help improve their quality of life.

Aim: To assess the awareness of Autism Spectrum Disorder among the Non- Medical students.

Method: A cross sectional study involving 352 non-medical students pursuing arts and engineering (both undergraduate and post graduates) in government and private colleges were involved for the study. Survey was conducted, and data related to ASD was collected using a self-administered questionnaire.

Result: Descriptive statistics was carried out ($P < 0.5$). Out of the total 352 students, 44.32% of the students were found to be aware about ASD and 55.68% of the students were not aware about it. 60% among the subjects were females and 40% were males who were found to have awareness about ASD.

Conclusion: Awareness of ASD to be created among the non-medical students. These will enhance in early identification and diagnosis of ASD with early intervention that are known to improve prognosis.

Key words: ASD, Awareness, Non-Medical students

INTRODUCTION

American Psychiatric Association (DSM-V) 2013, Autism spectrum disorder (ASD) is characterized by persistent deficits in social communication and social interaction across multiple contexts, including deficits in social reciprocity, nonverbal communicative behaviours used for social interaction, and skills in developing, maintaining, and understanding relationships. In addition to the social

communication deficits, the diagnosis of autism spectrum disorder requires the presence of restricted, repetitive patterns of behaviour, interests, or activities. [3]

The causes of ASD are unknown. [5,7] Studies suggests that there is a strong genetic basis, but it cannot be traced to a Mendelian (single - gene) mutation or to a single chromosome abnormality. [6,17] Risk factors for ASD include gender (males are three to four times more likely than females

to get ASD), family history, parent's age, and other disorders such as fragile X syndrome, tuberous sclerosis, Tourette syndrome and epilepsy. [15] Apart from these, the use of drugs during pregnancy has also been identified as a risk factor. [4]

Incidence extrapolations of India for ASD: 11,914 per year, 250 per month, 57 per week, 8 per day, 1.4 per hour. Prevalence rate: 1 in 500 or 0.2% or more than 2,160,000 people in India and is more prevalent in Males than Female. [8,11] Therefore the participation of the medical service in screening for cases of ASD is highly important and leads to significant improvement in the quality of life of autistic individuals and care givers. [20] Research has shown that parents are usually correct about noticing developmental problems, although they may not realize the specific nature or degree of the problem. [9,12] Diagnosis and treatment of ASD is provided by variety of health professionals. [14] DSM-V, criteria for ASD, belief about social, emotional, cognitive, treatment and prognosis of the disorder this knowledge are very important for health care professional. Recent researches show that the health care professional and physicians also have unbalanced understanding of ASD due to many of salient features of ASD including developmental, cognitive and emotional features. [19] Middle school student's knowledge of Autism was done, the results reveal that 46.1% were heard of autism and they accept that it's a chronic condition. A more detailed understanding of developmental changes in student's knowledge of autism should improve peer educational intervention. [13] The current study focus on to find out the awareness of ASD among the Non-medical students. A cross sectional study was conducted in Chennai, during a period of 9 months (September 2018 to May 2019).

METHOD

INSTRUMENTS

A questionnaire was developed by the investigator, that included all type of

questions based on the review of literature and was validated. The questionnaire consisted of 12 structured questions which focused on different aspects of ASD such as causes, symptoms, screening, diagnosis and treatment.

Participants:

The sample size of 353 non-medical students was included. 213 females and 140 males within the age range of 18-26 years, pursuing under graduation and post-graduation in non-medical field at private colleges as well as government colleges in Chennai.

RESULT

In 353 non-medical students 55.68% were unaware about the Term of ASD, only 44.32% were aware about ASD. 72.45% were known that ASD is a Neurodevelopmental disorder, 27.56% were unknown that ASD is a Neurodevelopmental disorder. 89.22% of non-medical students were unaware about the symptoms of ASD, 10.8% only have the awareness on ASD symptoms. 53.69% were accepted that ASD as a preventable condition, 46.3% were not known that ASD is a preventable condition. 93.75% were unaware about the screening procedure for ASD, 6.25% were aware about the ASD screening procedure. 41.48% were aware about that the ability of person's with ASD will be affected, 58.53% were unaware about it. 27% of students had accepted that the public has awareness of ASD, 15.62% were had an opinion of ASD will occur in high economic status people, 35.51% were an had opinion on ASD will occur in highly educated family. Awareness and unawareness of ASD among the non medical students were represented in table1. awareness and unawareness of ASD between the males non medical students and female non medical students represented in table2

	AWARE (N = 353) (n %)	UNAWARE (N = 353) (n%)	ρ values P<0.5
Term – ASD	44.32	55.68	0.55
ASD as Neuro developmental disorder	27.56	72.45	0.453
Symptoms-ASD	10.8	89.22	0.489
Prevention –ASD	46.31	53.69	0.000
Screening-ASD	6.25	93.75	0.336
Symptoms of ASD affect the Ability of the Person’s routine	41.48	58.53	0.444
Professionals involved	100	0	-
Awareness of public	27	72.44	0.485
Higher economic status	15.62	84.38	0.488
Highly educated families	35.51	64.49	0.488

TABLE 1 is showing the Awareness and Unawareness of ASD among the Non-medical students

	Awareness among men (N=140) (n %)	Awareness among women (N= 213) (n %)
Term – ASD	12.50	31.82
ASD as Neuro developmental disorder	9.83	18.18
Symptoms-ASD	5.68	9.09
Prevention –ASD	18.18	28.13
Screening-ASD	2.56	2.56
Quality of life	15.06	26.42
Professionals involved		
Awareness of public	6.53	9.03
Higher economic status	13.35	22.16
Highly educated families	10.51	17.05

TABLE 2 is showing the Awareness and Unawareness of ASD among the Males non medical students and females non medical students

CONCLUSION

The early signs of Autism can also appear in children who seem to have normal development. Autism affects as many as 1 in 59 children and 1 in 37 males and 1 in 151 female. [1] There is no medical detection or cure for Autism, but early diagnosis and intervention can improve Quality of Life. Early detection and intervention by which the symptoms of unacceptable language and behaviour can be minimized. [17] Parents are usually the first to notice unusual behaviours in their child. [16] Today’s students will be the future parents. Creating awareness among the students will play a vital role in early detection, early intervention, educational intervention, reduce the inappropriate attitude towards mental health services improve the quality of life of autistic children and their families. [10] Studies were done in medical students, health care professionals, middle school students and primary school teacher. [2,13,19] Our study focussed on Awareness of ASD

among Non-medical students. The result reveals that most of the non-medical students are unaware about the term of ASD. P value is >0.5. Very few only aware the screening about ASD. So we need to create the awareness among the non-medical students to promote them regarding ASD so as to allow for early diagnosis and appropriate treatment plan/therapy. Formal awareness camps to be done regarding the differentiating features of ASD, which will aid in early diagnosis of ASD.

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Question used in this study:

1. Have you heard about Autism Spectrum Disorder(ASD)
2. Do you know that ASD is a Neuro developmental disorder?
3. Do you know the symptoms of ASD?
If yes mention here _____
4. Do you think ASD can be prevented?
5. Are you aware about the screening tool of ASD?
If yes mention here _____
6. Does the symptoms of ASD affecting person's ability to
Function properly in schools, work and other areas of life?
7. What professional do you think are typically involved in the Diagnosis of ASD?
a) Neurologist b) Pediatricians c) Psychiatrist d) Psychologist e) Speech language pathologist f) Occupational therapist
8. Do you think that public is aware about ASD?
9. Autism is more commonly affecting children of high economic status
10. Autism is more commonly affecting children of highly educated families.
11. What is your suggestion to create awareness of ASD?
a) b) c)
12. What is your opinion about the study?
a) Excellent b) good c) fair d) poor

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