

Awareness of Autism among Physiotherapists

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ABSTRACT

Background: Autism is a neurodevelopmental disorder in which a person presents with a range of impairments in social interaction and verbal and nonverbal communication, as well as restrictions in behaviors and interests. In India, the prevalence of autism varied from the rural to the urban population, from 14/10,000 to 12/10,000. This study was intended to increase awareness about autism among physiotherapists, which would help their knowledge of the fundamental aspects of autism, such as etiology, diagnosis, and treatment.

Materials & Methods: A focused 14-item questionnaire was circulated to 102 physiotherapists from different colleges, clinics, and hospitals through an online survey platform. The link to the questionnaire was sent using various social networking sites such as email, WhatsApp, and Instagram. Ethical approval has been given.

Result: The result was carried out using Microsoft Excel version 2007. Out of a 102-person sample size, 47.4% of physiotherapists had more correct answers than neutral or incorrect ones, which showed that there is knowledge regarding autism among physiotherapists.

Conclusion: This study concludes that there is knowledge about autism, but also neutral responses by the physiotherapists, indicates the need for more awareness among them. A more accurate and widespread dissemination of information about autism may facilitate a smoother transition for physiotherapists.

Keywords: awareness, autism, physiotherapist.

INTRODUCTION

Globally, up to 10 out of every 1,000 children may have autism, a moderately common neurodevelopmental disorder. [1] In boys, it occurs more frequently than in girls. Autism is defined by significant abnormalities in social interaction and communication, the existence of stereotypes and unusual interests, and the onset of symptoms before the age of three in the areas of social communication development and imaginative play. [2]

The most significant nonverbal behaviors affected by qualitative social impairments during social interactions are eye contact, facial expressions, body postures, and gestures.

Failure to build peer relationships, a lack of spontaneous sharing of interests and enjoyment, and a lack of social or emotional reciprocity are further characteristics of autism.

An inability to initiate or maintain a conversation with others, the use of repetitious or peculiar vocabulary, and a lack of spontaneous pretend play are some of the examples of communication impairments. [2]

Restricted repetitive and stereotyped behaviors and interests include one or more stereotyped patterns of interest, rigid adherence to routines and rituals, stereotyped and repetitive motor mannerisms, and persistent obsession with

object parts. Children with autism extend a range in terms of intelligence quotient (IQ), and every child has a different level of functioning. [2]

Early diagnosis is necessary to begin comprehensive treatment quickly, which enhances the outcome. [3,4] To avoid delays in the delivery of such treatments, increased physiotherapist awareness is required. [5]

In order to increase the child's independence in activities of daily living and decrease his or her level of dependency, physical therapy is an important part of this programme. [6] Physiotherapists are concerned about and have access to information on the increasing prevalence of autism. [7]

There is a serious research gap in autism in developing countries, which has received minimal attention in our region. [8,9] Such information is needed for planning adequate education and awareness campaigns.

We hypothesized that there are considerable misconception and lack of knowledge about autism in physiotherapists. So, the purpose of this study was to conduct an exploratory and descriptive survey in order to better understand the extent of autism awareness among physiotherapists in Ahmedabad city. Awareness regarding autism helps the physiotherapists to plan a proper treatment protocol according to the chief complains of the patient.

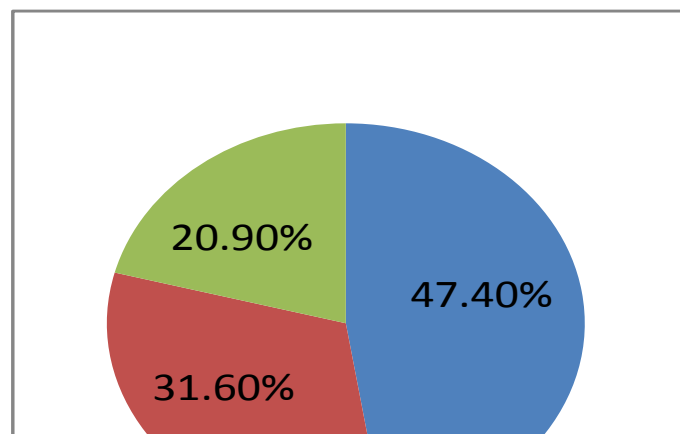
MATERIALS & METHODS

120 physiotherapists were approached and questionnaires were sent. Data from 102 physiotherapists from Ahmedabad, Gujarat, was collected. Snowball sampling was utilised in this cross-sectional observational research. A questionnaire was administered through Google forms. The link to the questionnaire was sent through WhatsApp and other social media, and the link was also forwarded to people apart from the first point of contact, and so on. Masters of physiotherapy, clinical staff, and teaching staff were included in this study.

On a scale of 0 to 4 (disagree, somewhat disagree, neutral, somewhat agree, agree), 14 statements about autism are to be answered. The 14 items were translated to a 5-point correctness scale for the primary analysis. For example, the scoring would be (disagree = 0; agree = 4) if the item statement were true. The scoring would be reversed (absolutely agree = 0) if the statement was false. The 14-item scale's overall "correct" score thus has a possible range of 0 to 56. The 14 elements and subsequent categorization into just three groups (incorrect, neutral, and correct).

RESULT

The result was carried out by using Microsoft Excel version 2007. Out of a total of 102 physiotherapists, 47.4% had the correct answer, 20.9% had the neutral answer, and 31.60% had the incorrect answer.



(Figure 1: Percentage of autism awareness among physiotherapists)

Out of the total respondents, 64% were female, and the largest age group represented was aged 21–30 years. The percentage of respondents was MPT (52.9%), clinical staff (38.3%), and teaching staff (9.8%). The percentage of respondents who answered each question correctly, incorrectly, or neutrally was calculated to identify these data. Here, disagree and somewhat disagree are included in the incorrect answer, agree and somewhat agree are included in the correct answer, and neutral responses are included in the neutral answer.

The seven statements with the most accurate responses were, from highest to lowest: "Autism is an emotional disorder" (incorrect 58.8%); "Vaccines are causing an increase in autism" (incorrect 67.6%); "Autism is diagnosed more frequently in males than females (correct 63.8%); "There is one intervention that works for all children with autism" (incorrect 56.9%); "Children with autism can grow up to live independently (correct 57.8%); "It is important that all children with autism receive special education services (correct 57.8%).

The five statements with the lowest correct responses were, from lowest to highest: "With the proper treatment, most children with autism will eventually outgrow it" (correct 71.6%); "All children with autism display poor eye contact." 50% of respondents gave an incorrect answer. "Autism runs in families" (incorrect: 39.2%); "Changing a child's diet will lessen the severity of autism symptoms" (incorrect: 43.1%); "Children with autism are smarter than standard tests demonstrate" (incorrect: 32.4%). This percentage of incorrect answers suggests that there is less awareness about autism.

These analyses thus far have used a five-point scale, including a neutral response at the midpoint. This was done for two reasons. First, it was important to see which items had the most respondents who essentially abstained, responding "neutral." These would be areas where public awareness was lower. Second, it was

interesting to look at those respondents who had a clear opinion and examine the percent of correct (vs. incorrect) responses by item. The two statements with the highest neutral response were, from highest to lowest: "There is a cure for autism (32.4%);" "Autism can be diagnosed as early as 18 months (25.5%).

DISCUSSION

The present study evaluated the Awareness of Autism among Physiotherapists in Ahmedabad city. The overall level of knowledge about autism is below 50%. Also respondents who are working in pediatrics clinics have more knowledge and awareness than the other.

Interestingly, while over 67.6% of respondents acknowledged that autism seemed to be increasing, most of these also thought that the increase was due to vaccine usage. The following point is unfortunate, given the solid evidence base amassed to counter this claim and the harm caused by parents refusing to vaccinate their children (Kaye et al. 2001¹⁰; Fombonne et al. 2006¹¹; Madsen et al. 2002¹²; Offit 2008¹³). A link between high ethylmercury exposure levels similar to those that were present in the United States in the 1990s and either one or two doses of the measles, mumps, and rubella vaccine. It was heartening to see that the statement with the highest accurate responding was, "Vaccines are causing an increase in Autism." With only 10.8% of respondents with an opinion agreeing.

Additionally 71.6% Respondents agreeing with the, "With the proper treatment, most children with autism will eventually outgrow it. It suggests that lack of awareness about it.

Optimistically, respondents also agreed that special education programmes were necessary and that it was likely that people with autism will one day be able to live independently, understanding the benefits of education and intervention.

The statement that received only a few right answers was "Changing a child's diet will lessen the severity of autism symptoms."

According to recent research, altering a child's diet is unlikely to lessen symptoms of autism (Johnson et al., 2011¹⁴); however, a lot of research on this subject is still ongoing (Gorrindo et al., 2012¹⁵), and it may be possible to identify a subgroup of autistic children for whom dietary changes would be therapeutic. There are limitations on what we may conclude from this type of study, as with most research.

Leigh Ann Tipton and Jan Blacher ^[16] conclude that these survey results are biased towards more autism awareness because people who were not at all interested in autism would be less likely to answer.

Marwan M Al-Sharbati et al. ^[17] conclude that the study findings showed that Omani teachers have little knowledge of autism. Teachers in Oman's public schools frequently hold false beliefs regarding autism. Additionally, there is a slight difference in the knowledge and attitude towards autism over specific areas of study between Omani male and female teachers.

CONCLUSION

This study concludes that there is knowledge about autism, but the neutral responses by the physiotherapists indicate the need for more awareness among them. More accurate and widespread dissemination of information about autism may facilitate a smoother transition for physiotherapists.

Declaration by Authors

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