

Autism Spectrum Disorder in Social Media: Content Analysis of You tube Videos

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Abstract

Internet and social media are used as important sources of information by the parents of autistic children. Youtube is used as a means to educate oneself on various issues of the disorder. In the current study you tube videos have been used as the source of data. The content analysis method was used to study 160 videos on autism. The results revealed a number of themes like diagnosis, therapy, interview, success stories of autistic individuals. Most of the Indian videos on autism were in the Hindi language.

Keywords: Autism, autism spectrum disorder, you tube, neurodevelopmental disorder, content analysis, social media, internet, parents

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I. INTRODUCTION

Autism spectrum disorder (ASD) is a complex developmental condition that involves persistent challenges in social interaction, speech and nonverbal communication, and restricted/repetitive behaviors (American Psychiatric Association, 2013). Symptoms of autism can be found in early childhood. According to Rehabilitation Council of India the incidence rate of autism in India is 1 in 100 children. Post diagnosis, the parents need timely information about the diagnosis, treatments, medications, schooling, career etc. and accordingly take informed decisions. This information is available in different languages, formats and sources. These information sources may be in the form of professionals and non-professionals. Professional sources include like pediatricians, teachers, psychologists, and non-professionals include family members, friends, books, internet, television, radio etc. In a study carried out by Mackintosh & Goin-Kochel (2005) it was observed that websites, newsletters, and books were found to be preferred sources and they were not only considered as sources of information but also as a means of support to parents of children with ASD. Chowdhary et.al (2002) evaluated online autism websites and the results showed that a number of quality sites are available to families and concluded that it is a challenging task for the parents to identify and access valid sites. The Internet is over flooded with information. You tube has emerged as a popular social media platform of online sharing ideas, talent, interests and information. Users having google account can watch, upload their videos, comment, rate and respond to comment, like or dislike the videos, subscribe the channel. One of the major concern of information found on You tube is misinformation. The researchers observed in their preliminary study that there are a number of videos on autism on You tube. With a view to identify quality videos, content analysis was conducted.

II. OBJECTIVES

- 1 To identify the total number of videos on ASD.
- 2 To know the duration and language of videos.
- 3 To analyze the topics covered in these videos.
- 4 To find out the number of videos uploaded by professionals and non-professionals.

III. LITERATURE REVIEW

Fusaro et.al (2014) collected the videos of ASD and Non-ASD children aged one to fifteen years and analyzed them by applying the Autism Diagnostic Observation Schedule (ADOS), which is considered to be a gold standard for diagnosis of ASD.

This was carried out to find whether this test can help in early identification of ASD outside clinical settings. The results showed high accuracy and reliability in ADOS.

Leatherland and Chown (2015) presented in their study the portrayal of autism in online mode. They studied the terminology, language, topics covered by the popular online organizations and also checked the kind of approaches to adopted by these organizations towards autism. Content analysis research method was used for the study. The research identified eight organizations and it was observed that the information found in these websites was inconsistent and there was a divide in the approach towards autism in these organizations.

Lloyd, Osborne & Leed (2019) carried out content analysis of you tube videos made by parents of autism spectrum disorder. The topics identified were diagnosis, therapies, relation with self and the child, available services etc.

Lacruz-Pérez (2021) analyze the content of the most viewed videos in Spanish on YouTube related to autism spectrum disorder. The search terms used for the study were "autism

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AND cure” (“autismo AND curación”), “autism AND intervention” (“autismo AND intervención”), and “autism AND education” (“autismo AND educación”). Total 150 videos were analyzed in the study. The results show that the netizens see less videos on ‘cure’ category as compared to other two topics. The duration of the ‘cure’ videos is very less than the videos on ‘intervention’.

Research Methodology & Scope:

The data for the present study was collected using observation technique. Researcher collected 160 videos related to the autism spectrum disorder uploaded during the time period considered was from January 2020 to July 2021. A search was conducted using the search terms Autism spectrum disorder, autism, treatment, therapy, diagnosis. The study has selected only Indian Videos. Three languages were considered for the study viz. English, Hindi (National language of India) & Marathi (regional language of the state of Maharashtra).

IV. RESULTS

Table No 1. Year wise number of videos on autism

Sr. No.	Year of upload	No. of videos	Percentage
1	2011	1	0.62%
2	2012	1	0.62%
3	2013	4	2.50%
4	2014	3	1.87%
5	2015	6	3.75%
6	2016	9	5.62%
7	2017	11	6.87%
8	2018	31	19.37%
9	2019	36	22.50%
10	2020	27	16.87%
11	2021	31	19.37%
Total		160	100%

Table no.1 shows the year of launching of videos on autism spectrum disorder. Maximum 36(22.50%) videos are launched in year 2019. Followed by 31(19.37%) videos are launched in 2018 and 2020 and 27(16.87%) videos are launched in 2020. Only 2 videos 1(0.62%) is launched in the year 2011 and 2012 respectively.

Table no. 2 Duration of videos:-

Sr.No	Duration (Minutes)	ASD (No. of videos)	Percentage
1	1-10 Min	87	54.37%
2	11-20 Min	26	16.25%
3	21-30 Min	20	12.50%
4	31-40 Min	9	5.62%
5	41-50 Min	1	0.62%
6	51-60 Min	9	5.62%
7	1 Hour above	8	5.00%
Total		160	100%

Table no. 2 shows the duration of videos ASD. Maximum 87(54.37%) videos are available in the duration 1-10 minutes and minimum 1 (0.62%) videos is available in duration 41-50 Minutes. 8(5.00%) Number of videos is available in duration one hour above.

Table no. 3 Language of videos:

Sr.No	Language of videos	No of Videos	Percentage
1	Hindi	82	51.25%
2	English	69	43.12%
3	Marathi	9	5.62%
Total		160	100%

Table no. 3 indicates the language of videos of uploaded by autism spectrum disorder. The videos are available in three language English, Hindi and Marathi. It can also observe that the maximum numbers of videos are available in Hindi language 82(51.25%) followed by 69(43.12%) in English language and minimum number 9(5.62%) of videos are available in Marathi language.

Table no. 5 Topic wise analysis of videos on ASD.

Topic wise analysis of videos on ASD is listed below:

Sr. No	Autism Spectrum Disorder Videos	No. Of videos	%
1	What is autism, symptoms, causes, general treatment	37	23.12%
2	Speech therapy for autism	28	17.50%
3	Behavior therapy for ASD	7	4.37%
4	Music Therapy for ASD	3	1.87%
5	Ayurveda therapy for ASD	5	3.12%
6	Stem cell therapy for Autism	27	16.87%
7	Homeopath treatment	7	4.37%
8	Yoga series	2	1.25%
9	Parent's experiences on autism	13	8.12%
10	Success stories of autistic children	11	6.87%
11	Interviews	20	12.50%
	Total	160	100%

Table no. 5 indicates the category wise distribution of videos uploaded on YouTube. Maximum videos are available on what is autism, symptoms, causes, treatment 37(23.12%). A variety of treatment options are available for autistic individuals. Among them maximum videos are on speech therapy 28 (17.50%) and stem therapy 27 (16.87%). There are 13 (8.12%) videos on interviews of parents in which they have shared their experiences and 11(6.87%) videos on Autistic children who have done very well in some of the fields which are source of inspiration for parents of children with similar disorder. In 20 (12.5%) videos interviews of pediatricians are seen discussing on various aspects of autism.

Table no. 6 Professionals and Non-Professionals uploaded videos:

Sr.No	Title	No. of Videos	Percentage
1	Professional	127	79.4%
2	Non-Professional	33	20.6%
	Total	160	100%

Table no. 6 shows the videos uploaded by professional and non-professional non YouTube Channels. Maximum numbers of videos are uploaded by professional 127(79.37%) and 33(20.62%) videos are uploaded on non-professional related to ASD respectively.

V. DISCUSSION

The videos on you tube are a source of technical as well as personal information. The results show that the number of videos on autism spectrum order is increasing day by day. A number of videos 37(23.12%) discuss about the nature of autism, its causes and symptoms. Autism can be treated holistically. Various treatment options like stem cell therapy, speech therapy, occupational therapy is talked about in these videos. Alternative treatment options like Ayurveda, Homeopath, Yogic treatment is also seen to be considered in these videos. Use of music therapy is also put forward by some physicians. The videos narrating personal experiences about autism can guide the parents who wish additional information. The success stories shared by autistic children and their families can psychologically boost and provide relief to the parents who are concerned about the future of their autistic child. Availability of videos in English as well as regional language is an additional benefit to the parents who have difficulty with English language. The authors of the videos uploaded by professionals are channels owned by doctors, professional's viz. audiologists, special educators, psychologists, speech and language therapists etc. Interviews conducted on National television channels are also in large number. These interviews assists in creating awareness among general public and families of autistic individuals.

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