

Autism Spectrum Disorder: Time for a Change

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Abstract

With the sedentary life style, eating habits, daily irregular routine with less or no physical exercise has led to the development of various diseases either it be genetic or environmental. A lot of genetic diseases or disorders are reported everyday which is completely governed by the genetic makeup of an individual. The following article describes one such genetic disease known as autism spectrum disorder and also discusses the various ways that would help in making a difference in the thinking of the people bringing awareness about the disorder. The article describes the possible causes, signs and symptoms, statistical data, awareness programmes such as conferences, open access, journals, campaigning etc.

Keywords: *Autism spectrum disorder; Genetic factors; Neurosciences; Social interaction; Communication; Open access journals*

Introduction

Autism spectrum disorder is a neurodevelopmental disorder that alters the organisation and functioning of the nerve cells of the brain which leads to the difficulty in autistic people to have social interactions, verbal and nonverbal communications with repetitive behaviours like spinning and flapping of hands [1]. Though the exact cause of autism is still unknown but somehow some research suggests it as a combination of genetic and environmental factors. Some other factors like consumption of cocaine or alcohol during pregnancy or rubella infection also known to contribute for this disorder. Autistic children show less or no response to social stimuli. The early signs of autistic children is delayed babbling, unresponsiveness (does not respond to their name), less eye contact, don't smile back, repeated flapping of hands, spinning round, constantly repeating the same words [2-9].

As per the global records in 2013, about 21.7 million people are affected by autism. It is estimated that about 1 in 100 children is affected by autism [10]. Normally boys are affected four to five times than the girls. In the United States about 1.5 % children are diagnosed with ASD and there is a 30% increase in 2014 as of 2012. The rate of autism in adults of 18 years of age and above is 1.1% in UK. According to reports since 1980 the autistic people has been increasing and the reason is unsolved till date. However some reports suggest children and adult recovering from this disorder [11-15].

Now a day most of the people have started learning about autism. While most people consider ASD as a disorder and burden looking for a cure and prevention, at the same time other people have started looking it at a different perspective and believe in accepting autism as a difference and not as a disorder seeking treatment. The autistic culture movement otherwise called as autism right movement (ARM) encourages the autistic children, their parents and their caregivers autism as special functional

variation rather than a disease seeking cure and prevention. It focuses on the development of social networking sites to allow the autistic people to interact in their own ways, to develop therapies for autistic people to be skilled with skills so that it would help them cope up with other human beings and they also help in making realize to recognise autistic community as a minority group [15-22]. As part from this movement and awareness programmes the open access peer reviewed articles play an important role. The open access articles help the people not to remain ignorant about the autistic people and their care givers and family members. It also increases the visibility because of its easy accessibility. The impact factor provided to these open access articles decides the excellence, quality of the research done and the number of citations received for the same published articles calculated on the number of articles that undergoes a double blind peer review process guided by the editorial board [23-28].

Autism spectrum disorder: change is a must: thinking autism as special functional variation: role of societies

With the increasing awareness there are various societies those who also work for the awareness campaign for autism. One such society is **Autism Community Network** in South Texas [29, 30]. The board certified professionals provides the service to preliminary screen the children showing the signs of autism or a full interdisciplinary autism diagnosis for the child. It provides hands on training on how to interact with the autistic children, how to make them skilful and to face the day to day challenging behaviours of the autistic child [31-35]. It maintains the record for the autism community and act as an information hub for the people residing in South Texas. OMICS international have an association with another such society known as **Cancellautismo ONLUS** which strongly believes that the disorders in metabolic systems, endocrine system, gastrointestinal system, immune system is the sole responsibility of such disorders and the disease can only be cured if these ailments are cured and not by providing injections and therapies by the doctors [36-40]. As per the research conducted by ' Institute for Research on Autism (ARI-DAN), it has identified effective treatments for autism, showing that Applied Behavioural Analysis (ABA Applied behavioural Analysis), considerable progress can be made leading to complete recovery. **Macedonian Scientific Society for Autism** is a society which deals with the treatment, rehabilitation of autistic patients and also works in cooperating with the parents of the autistic children. It also deals with the coordination between governmental and non-governmental organizations dealing with autism [40-45].

Open access journals: accessibility, visibility and its importance

With the changing modern era internet has become a necessity for all human beings. People become aware and knowledgeable through videos, ad campaigns shown in the internet. Open access journals and articles is one such platform to make people knowledgeable about the changing trends and updates [46-50]. It increases the visibility and accessibility without any financial and legal barriers. It helps in exchanging and acquiring ideas regarding new research advances, development of modern techniques and technologies, new ideas for conducting research, recent updates and advances on on-going stigma. **Journal of Psychological Abnormalities** is an open access journal that publishes articles on psychological disorders like learning disorders, communication disorders, difficulty in social interaction, eating disorders etc. The main objective of the journal is to motivate the masses through its publications where the experts and scientists share, exchange and produce their ideas in the field of psychological and mental disorders [51-57]. It publishes the current findings and research on mental disorders in the form of original articles, case reports, research findings, new techniques and therapies to cure mental disabilities. **Journal of Psychology & Psychotherapy** publishes the recent findings and research on the mental disabilities and the therapies needed to resolve the difficulties of the psychiatric patients in the form of therapies called

psychotherapy to make their and their well-wishers life somehow manageable and sustainable [58-62]. It publishes articles on Clinical psychology, Developmental psychology, Neuropsychology, and this journal offers is the source for the latest findings in behavioural, developmental, cognitive, health and educational psychology. **Autism – open access** is an academic journal which publishes recent advancements and research in the developmental disorders in children. It is an open access journal which makes it freely available without any financial and legal constraints throughout the world. The main motive of this journal is to make the caregivers and parents of the autistic children aware about the growing day to day challenges faced by them and make them learn about the therapies through which they can deal with the situation in every possible way making the autistic patient learn, adapt and communicate [63-66]. One such journal, known as **Journal of Communication disorders, deaf studies and hearing aids** also publishes articles on communication disorders and covers mental disorders like Autism spectrum disorders, Communication impairments, Expressive language disorders, Language disorders, learning disabilities, speech disorders and speech language pathology. **Journal of Child and Adolescent Behaviour** is one such open access journal which focuses on the publication of the article on child and adolescent mental behaviour and the disabilities. A special issue on **Autism spectrum Disorder, the past, the present and the future** is going to be released by the journal in April, 2017. The special issue will cover all the aspects on the children learning, communication and interaction, speech and adaptation disabilities. Moreover the journal would publish the recommendations, therapies and new research findings provided by the researchers in the following special issue. Being an open access it would provide knowledge as well awareness among various people facing the difficulty every day. In an article entitled **“Using Eye-Tracking as Support for the TEACCH Program and Two Teenagers with Autism-Spectrum Disorders”** published in the **Journal of Neuroscience & Clinical Research** the author, Fabienne Giuliani has suggested that mobile eye-tracking can be a powerful tool to design the strategies to improve learning disabilities in autistic patients [67-72]. According to the author two teenagers were taken as the experimental individuals and after one year of individualized treatment, the teenagers’ competencies in eye contact with target points were noted to be improved. These preliminary results showed that the intervention should take place in ecological conditions and the evaluation by Mobil eye-tracker, bypasses language deficits which could be integrated into clinical routines to increase generalization [73-75].

Conferences involving speakers and editors and their innovative ideas on autism spectrum disorder

Conferences have helped a lot in imparting proper knowledge, new research findings and innovations on account of ASD. **2nd International conference on Autism** was conducted in Arizona, USA on September 15-16, 2016. The theme of the conference was **“Understanding Autistic Mind and Accelerating Recovery”**. The conference was flooded with eminent speakers from across the globe [76]. There was an exchange of ideas among the notable speakers, delegates and scientists who enlightened the gathering with their research findings and therapies. **2nd International Conference on Psychiatry and Psychiatric Disorders** was held in Chicago, Illinois, USA on May 02-04, 2016 with a motive of analysing and triggering therapeutic approaches for psychiatric disorders. **3rd International Conference on Psychiatry & Psychosomatic Medicine** Conference was held in Dubai, UAE in December 05-06, 2016 with a motive of assessment of human behaviour with mental illness and diagnosing the mentally disabled patients with the application of psychosomatic medicine to achieve the mental wellness. **13th International Conference on Psychiatric-Mental Health Nursing** was conducted in London, UK in October 03-04, 2016 which focuses on achieving mental wellness by understanding human minds by psychiatric approaches [77-82]. This conference invited participants from all leading universities, research institutes and diagnostic institutes to share their experience on the development of mental health and its wellbeing through psychiatric approaches by understanding the

human mind and human behaviour. One such conference called **International Conference on Psychology, Autism and Alzheimer's Disease** was held in San Antonio, USA in September 30th – October 1st, 2013 to understand the increasing trend of the psychological disorders with time and its global perspectives and current trends in psychology. **1st-annual-cyprus-international-conference-on-autism-treatment** was conducted in Paphos, Cyprus with the research entitled “Magic Always Happens through our interdisciplinary approach to autism”. It had invited professionals and dignitaries and conducted various workshops regarding autism [83-89].

Recent advancements in treatment and therapies

Many notable speakers from different research institutes, universities, medical institutes and trusts have expressed their ideas and views on the mental disabilities and the therapies to be undertaken to face the increasing every day challenges. Charmaine Fuller is a mother Mentor, who assists the mothers in developing the life of their special kid and bringing a relief to their life as well beyond the diagnosis of their special kid. She has been an advocate for parents by serving on the Michigan Special Education Action Committee, the Wayne County Regional Educational Service Agency parent board and for the Michigan Early on Interagency Coordinating Council in Wayne County, Michigan. Special parents special care workshop main objective is loving yourself, time management, self-care tips, creating task list for you, setting and applying boundaries [90]. Collen Tryner is the parent of an autistic (nonverbal) teenager of 18 years of age. She started self-schooling her son and adapted autism sign language as a unique way of communication with her son. She recorded all her experiences and shared the video to doctors, parents of the special children, universities, professors and also in her personal web site. This adapted autism sign language takes advantage of a multi-sensory approach. This has helped her son to adapt to school environment, work and family events. The main motive of this approach is to make the child feel safe and not always under guard which will make them tensed [91]. Denis Gris is another speaker belonging to the University of Sherbrook, Canada. His main interest is to discover novel anti-inflammatory pathways within the central nervous system and to design therapies to cure neurological disorders like autism, epilepsy, multiple sclerosis etc [92]. Dr. Alok Sharma is a world renowned neurosurgeon who worked at Karolinska hospital in Stockholm where neural transplantation was performed for the first time. According to his ideas bone marrow stem cells have unique ability to treat autism. According to an experiment performed many patients showed improvement in communication, attention, eye contact, social interaction by administering the autologous bone marrow mononuclear cells intrathecally along with a personalized multidisciplinary neurorehabilitation program after the cellular therapy [93]. Among a list of therapies music therapy clinic plays as an important therapy in treating autism. Dorita S. Berger is the Editor in chief of Journal of Biomusical Engineering whose research interest is rhythmic and movement in music-based sensorimotor eurhythmic treatment of autism and other neurophysiologic diagnoses [94]. Professor Ian M. Evans obtained his PhD at Institute of Psychiatry, Kings College in 1970. He is a fellow of American Psychological Association, the Association for Psychological Sciences and Royal society of New Zealand. He mostly involves himself in studying the behavioural therapy which concerns the emotional development of children, their interaction and support children with disabilities like autism [95]. Jair de Jesus Mari is the professor of Psychiatric Department at Escola Paulista Medical School of the Federal University of São Paulo. He earned his PhD from King's College. He is a lead researcher in the National Research Brazilian Council (CNPq) with studies in the areas of Psychiatric Epidemiology, Systematic Reviews, Schizophrenia, Health Services Evaluation, Violence, and Prevention of Psychiatric Disorders. He has special research interest in Schizophrenia, Autism, Drug Addiction, and Psychiatric Epidemiology [96].

Discussion and Conclusion

With the sedentary lifestyle and everyday food habits many genetic diseases have cropped up. Autism Spectrum disorder is one such neurodevelopmental disorder which is increasing at an alarming rate. More than 3.5 million Americans are autistic i.e. 1 in 68 births [97]. However this has forced the researchers and scientists to evolve with new ideas and therapies to get rid of this disease which has become very unsustainable for many families. Courage and never ending help must be provided for the parents and caregivers of the autistic children and hands on training must be provided so that they will always be ready for the day to day challenges [98]. Many well-known doctors and researchers have come up with great ideas like bone marrow integration, adaptive autism sign language, the increased intake of Vitamin D which has shown improved signs in the special children like improved interaction, communication, eye contact, concentration etc., [99]. However the exact reason for autism is still unknown. But it's high time to recognise autism as special functional gene variation rather than a disease seeking cure [100].

REFERENCE

1. Poquet H, et al. Further evidence for *dlgap2* as strong autism spectrum disorders/intellectual disability candidate gene. *Autism Open Access* 2017; 6:197.
2. Di Tore PA, et al. Autism spectrum as an empathy disorder. *Autism Open Access* 2017; 6:198.
3. Bryan J. Autism and the search for need fulfilment. *Autism Open Access* 2017; 6:199.
4. Cashin A, et al. Conceptualization of a heuristic to predict increase in restricted and repetitive behaviour in asd across the short to medium term. *Autism Open Access* 2017; 7:200.
5. Pouretemad HR, et al Case report of the unique effects of aba on a child with autism in Iran. *Autism Open Access* 2017; 7:201.
6. Jimenez L. Use of mind maps for understanding the autistic condition. *Autism Open Access* 2017; 7:202.
7. Adubasim ICJ, et al Dyslexia-a learning difference. *Autism Open Access* 2017; 7:203.
8. Richfield S. Finding your parenting path with your autistic child. *Autism Open Access* 2016; 6:e141.
9. Alcock J. An Autoethnography of parenting a daughter whose complex disability was diagnosed in her adulthood. *Autism Open Access* 2016; 6:193.
10. Nikopoulos CK, et al. New Techniques in interventions for children with autism spectrum. *Autism Open Access* 2016; 6:195.
11. Shivanvitha E, et al. Autism–neurodevelopment disorder. *Autism Open Access* 2016; 6:196.
12. Verma RK. In vivo evaluation of the antidepressant activity of a novel polyherbal formulation. *Autism Open Access* 2016; 6:194.
13. Siddiqui MF, et al. Mitochondrial dysfunction in autism spectrum disorders. *Autism Open Access* 2016; 6:190.
14. Shaker NM, et al. Serum levels of S100b, interleukin-6 and anti-Transglutaminase Ii IgA as immune markers in a sample of Egyptian children with autistic spectrum disorders. *Autism Open Access* 2016; 6:191.
15. Archer T. Epigenetic influences upon autism spectrum disorder. *Autism Open Access* 2016; 6:192.
16. Pavan E, et al. Autism or new autisms? A Psychologist Point of View. *Autism Open Access* 2016; 6:e140.
17. Schofield K. Autism, chemicals, probable cause and mitigation: a new examination. *Autism Open Access* 2016; 6:184.

18. Yoshimatsu Y, et al. Characteristics of the understanding and expression of emotional prosody among children with autism spectrum disorder. *Autism Open Access* 2016; 6:185.
19. Wright B, et al. An autism spectrum disorders forum: a model for the effective use of multidisciplinary assessment and intervention planning with limited clinical resources. *Autism Open Access* 2016; 6:186.
20. Al Ansari A, et al. Outcomes for adolescents and young adults with autism spectrum disorders: general social functioning. *Autism Open Access* 2016; 6:187.
21. Di Renzo M, et al. T.U.L.I.P. protocol (tce, uoi, leiter-r as indicators of predictivity) for the assessment of the developmental potential in children with autism spectrum disorders. *Autism Open Access* 2016; 6:188.
22. Mousavinejad E, et al. Mitochondrial dysfunction in autistic children and oral coenzyme q10 supplementation treatment. *Autism Open Access* 2016; 6:189.
23. Siniscalco D, et al. New born alliance for autism care and research: an Italian experience. *Autism Open Access* 2016; 6:e139.
24. Patil A, et al. An update on dental outlook for autism. *Autism Open Access* 2016; 6:176.
25. Bergen D. Play as a mediator of autism: concerns and possibilities. *Autism Open Access* 2016; 6:177.
26. Grecucci A, et al. An abnormal cerebellar network in children with autistic spectrum disorder: A morphometric study. *Autism Open Access* 2016; 6:178.
27. Evans-Williams CVM. Diagnosing/recognising high functioning autism in adult females: challenging stereotypes. *Autism Open Access* 2016; 6:179.
28. Young S. Exercise effects in individuals with autism spectrum disorder: a short review. *Autism Open Access* 2016; 6:180.
29. Israelsen M, et al. The relationship between narrative proficiency and syntactic complexity of story retells elicited from children with ASD spectrum disorders (ASD). *Autism Open Access* 2016; 6:181.
30. Szczaluba K, et al. Paternally inherited gabrb3 intragenic deletion in a boy with autistic features and angelman syndrome phenotype—case report and literature review. *Autism Open Access* 2016; 6:182.
31. Zhen-Huan L, et al. Quality of life of children with ASD. *Autism Open Access* 2016; 6:183.
32. Kandaswamy R. The truth about using medical marijuana and cannabis in treating autism. *Autism Open Access* 2016; 6:e138.
33. Eapen V, et al. There are gains, but can we tell for whom and why? Predictors of Treatment Response Following Group Early Start Denver Model Intervention in Preschool - Aged Children with Autism Spectrum Disorder. *Autism Open Access* 2016; 6:168.
34. Sharma A, et al. PET - CT scan shows decreased severity of autism after autologous cellular therapy: a case report. *Autism Open Access* 2016; 6:169.
35. Schultz ST, et al. Acetaminophen use for fever in children associated with autism spectrum disorder. *Autism Open Access* 2016; 6:170.
36. Torres A, et al. A killer immunoglobulin - like receptor gene - content haplotype and a cognate human leukocyte antigen ligand are associated with autism. *Autism Open Access* 2016; 6:171.
37. Lavi A. Clinical Assessment of Pragmatics (CAPs): A validation study of a video-based test of pragmatic language in adolescent students. *Autism Open Access* 2016; 6:172.

38. Shushpanova TV, et al. Cortical synaptogenesis in the human brain in conditions of prenatal alcoholization. *Autism Open Access* 6:173.
39. Cross JN. ASD and preterm low birth weight infant- a risk factor. *Autism Open Access* 2016; 6:174.
40. Siniscalco D, et al. A step forward for autism: the new declaration by European Union. *Autism Open Access* 2015; 6:e137.
41. Kandaswamy R. The truth about using medical marijuana and cannabis in treating autism. *Autism Open Access* 2016; 6:e138.
42. Berman MH. Treating autistic patients in the dental office: a common sense protocol. *Autism Open Access* 2015; 6:1000157.
43. Mazza M, et al. An innovative approach to development of social abilities in individuals with autism:a pilot study. *Autism Open Access* 2016; 6:163.
44. Nirmala SVSG. Dental care and treatment of children with emotional disorders – an overview. *Autism Open Access* 2016; 6:167.
45. El Mowafy AM. Emerging clues and altered metabolic findings in autism: breakthroughs and prospects from omics studies. *Autism Open Access* 2016; 6:166.
46. McQuiddy V, et al. Occupational therapy using rapid prompting method: a case report. *Autism Open Access* 2016; 6:165.
47. Ming X, et al. The utility of MRI in children with autism spectrum disorder. *Autism Open Access* 2016; 6:164.
48. Mrazova L, et al. Triple trouble: a case report of an unusual combination of duchenne muscular dystrophy, epilepsy, and autism. *Autism Open Access* 2016; 6:162.
49. Pichiecchio A, et al. Brain diffusion tensor imaging and volumetric analysis: grey and white matter changes in preschool children with autism spectrum disorder. *Autism Open Access* 2016; 6:161.
50. Renzo MD, et al. From the emotional integration to the cognitive construction: the developmental approach of turtle project in children with autism spectrum disorder. *Autism Open Access* 2016; 6:160.
51. Keller R, et al. Diagnostic characteristics of psychosis and autism spectrum disorder in adolescence and adulthood. a case series. *Autism Open Access* 2016; 6:159.
52. Berman MH. Autism spectrum disorder-a paediatric dentist's perspective. *Autism Open Access* 2015; 6:158.
53. Sabine KC. Dance movement therapy improves body image in young adults with autism spectrum disorder. an empirical investigation. *Autism Open Access* 2016; 6:175.
54. Kandaswamy R. Autism and relationships: the myth of cultivating relationships and the truth about energetic families. *Autism Open Access* 2015; 5:e136.
55. Ganaie SA. A scientific research review on the pattern of psychopathological comorbidity in persons with intellectual disabilities. *Autism Open Access* 2015; 5:147.
56. El Sayyad HIH, et al. Fish oil supplementation ameliorated brain lesions induced by diabetes and hypercholesterolemia in male wistar albino rats. *Autism Open Access* 2015; 5:148.
57. Fernandes M, et al. Adherence of ASD children and adolescents to language therapy. *Autism Open Access* 2015; 5:150.
58. Shane G, et al. Do the stem cells really work with autism spectrum disorders associated with neuro-immune interaction? *Autism Open Access* 2015; 5:151.

59. Uwaezuoke SN. Autism spectrum disorder in children: the disparities between the developed and developing countries. *Autism Open Access* 2015; 5:152.
60. Vyshedskiy A, et al. Mental imagery therapy for autism (MITA)-an early intervention computerized brain training program for children with ASD. *Autism Open Access* 2015; 5:153.
61. Barnhill K, et al. Analysis of dietary intake in children with autism spectrum disorder. *Autism Open Access* 2015; 5:154.
62. Gwynette MF, et al. Yoga as an intervention for patients with autism spectrum disorder: a review of the evidence and future directions. *Autism Open Access* 2015; 5:157.
63. Bonnard V, et al. Emotional face perception: event-related potentials (erps) contribution to differentiate schizophrenia and autism spectrum disorders in adolescents. *Autism Open Access* 2015; 5:156.
64. Siniscalco D, et al. A new opportunity for autism: the first specific Italian law. *Autism Open Access* 2015; 5:e135.
65. Rajalakshmi K. The science behind the absence of autism in the Amish community: energetic immunity. *Autism-Open Access* 2015; 5:e131.
66. Hernandez C, et al. GABR genes, autism spectrum disorder, and epilepsy. *Autism Open Access* 2015; 5:e132.
67. Rajalakshmi K. The emerging revolution in autism: re-alignment of energies and being one's own authority in autism healing. *Autism Open Access* 2015; 5:e133.
68. Kandaswamy R. Autism: new understanding of the symptoms through discoveries made in psychoneuroimmunology. *Autism Open Access* 2015; 5:e134.
69. Sonia M. The miller umwelt assessment scale: a tool for planning interventions for children on the autism spectrum. *Autism- Open Access* 2015; 5:140.
70. Adewale V. Black autistic lives matter. *Autism Open Access* 2015; 5:141.
71. Kourtian S G, et al. Serum of mothers having autistic children induces cerebellar purkinje cell alterations in experimental model: a possible cause of autism. *Autism Open Access* 2015; 5:145.
72. Fahnestock M, et al. Bridging the gap between genes and behavior: brain-derived neurotrophic factor and the mtor pathway in idiopathic autism. *Autism Open Access* 2015; 5:143.
73. Stefano G B, et al. Mitochondria, microbiome and their potential psychiatric modulation. *Autism Open Access* 2015; 5:144.
74. Naguy A, et al. Mirtazapine-galantamine combo? tackles behavioral facets in autism. *Autism Open Access* 2015; 5:145.
75. Archer T. Exercise Alleviates Autism Spectrum Disorder Deficits. *Autism Open Access* 2015; 5:146.
76. Gallone G. Autism Family Care: The Experience of an Italian Association. *Autism Open Access* 2015; 5:e127.
77. Meral BF. Obesity Risk of Children With Autism Spectrum Disorder: Is The Food Selectivity a Probable Reason? *Autism Open Access* 2015; 5:e128.
78. Siniscalco D, et al. Research Hypothesis in Autism: The Role of Therapeutical Ozone. *Autism Open Access* 2015; 5:e129.
79. Rajalakshmi K. Epigenetics as a Solution in Autism: Control above Autism Genes. *Autism Open Access* 2015; 5:e130.
80. Simermeyer JL, et al. Motor planning and End-state Comfort in Children with Autism Spectrum Disorders. *Autism Open Access* 2015; 5:138.
81. Elliott JP, et al. Autism is not caused by terbutaline. *Autism-Open Access* 2015; 5:139.
82. Zaky EA. Percussions of nature and nurture interplay on children's and adolescents' behavior. *J Child Adolesc Behav* 2017; 5: e114.

83. McCarthy JB, et al. First episode psychosis in children: precursors of psychotic disorders and gaps in research. *J Child Adolesc Behav* 2017; 5: e112.
84. Zaky EA. What is wrong with sandy????!!!! is she seriously ill??? school refusal; is it a diagnosis or a presenting complaint??? *J Child Adolesc Behav* 2017; 5: e113.
85. D'Hooghe D. "Seeing the unseen": early attachment trauma and the impact on child's development. *J Child Adolesc Behav* 2017; 5:326.
86. Engur B. Parents with psychosis: impact on parenting and parent-child relationship. *J Child Adolesc Behav* 2017; 5: 327.
87. Horowitz-Kraus T, et al. Maturation of brain regions related to the default mode network during adolescence facilitates narrative comprehension. *J Child Adolesc Behav* 2017; 5: 328.
88. Edwards AL. Teaching african american children about race: fostering intergroup relationships through parental racial socialization. *J Child Adolesc Behav* 2017; 5: 329.
89. Unasho YS, et al. Prevalence and contributing factors of childhood physical abuse in households and at schools among school adolescents in Arba Minch town, Southern Ethiopia. *J Child Adolesc Behav* 2017; 5: 331.
90. Nayak, et al. Study of risk factors of academic underperformance in rural school children in a coastal district of Odisha. *J Child Adolesc Behav* 2017; 5: 332.
91. Khademi J, et al. Social functioning and mental wellbeing in 13- to 15-year-old adolescents in iran and finland: a cross-cultural comparison. *J Child Adolesc Behav* 2017; 5: 333.
92. Butchon R, et al. The development and growth of children aged under 5 years in northeastern thailand: a cross-sectional study. *J Child Adolesc Behav* 2017; 5: 334.
93. Ndoromo O, et al. Domestic violence as a risk factor for children ending up sleeping in the streets of post-war South Sudan. *J Child Adolesc Behav* 2017; 5: 335.
94. Nkhata MJ, et al. An investigation of the contributing factors to adolescent deviant behaviours in rural community day secondary schools with respect to the social and environmental aspects. *J Child Adolesc Behav* 2016; 4:319.
95. Profice C, et al. Children and nature in tukum village: indigenous education and biophilia. *J Child Adolesc Behav* 2016; 4:320.
96. Ge W, et al. Augmented reality video games: a commentary on what all parents and doctors should know. *J Child Adolesc Behav* 2016; 4:321.
97. Masi L, et al. ADHD and DMDD comorbidities, similarities and distinctions. *J Child Adolesc Behav* 2016; 4: 325.
98. Renzo MD, et al. Assessment of Executive Functions in Preschool-Aged Children with Autism Spectrum Disorders: Usefulness and Limitation of BRIEF-P in Clinical Practice. *J Child Adolesc Behav* 2016; 4: 313.
99. Alamuti E, et al. Comparison of Child and Parent Cognitive Behaviour Therapy on Reduction of Attention Deficit Hyperactivity Disorder Symptoms in Children. *J Child Adolesc Behav* 2016; 4:285.
100. Crawford S, et al. Increased Autism Incidence: Is there a Single Cause? *J Child Adolesc Behav* 2016; 4:273.