

Technology to Take Care of Autism

Tanjir Rashid Soron*

Cyberpsychology Research Organization, Dhaka, Bangladesh

The global prevalence of autism has increased twenty to thirty fold with in last 5 decades due to change of diagnostic criteria, increased awareness and biopsychosocial transformation. It is a global phenomenon that affects people of all strata from developed and developing countries. However, the developing countries are affected more severely by this rapid escalation of this disease due to their lack of preparedness, resources and various other sociocultural problems. Among the developing countries Bangladesh is making a remarkable contribution in autism awareness and the country has already established herself as the role model for the low and middle income countries [1]. Existing literatures reported about 2 to 8.4 children per thousand are suffering from Autism Spectrum Disorder in this country [2,3]. However, none of these data was extracted from a nationwide sample and few other studies have major methodological concern and inconsistency that prevent them from citing in this article. Moreover, the researchers suspect the actual rate of Autism in Bangladesh will vary widely from the existing data when a real time nationwide data will be collected using a valid instruments with the expert guidance.

Bangladesh has gone through the explosive growth in the Information Communication Technology in the last decade and every part of the country is under the mobile network coverage. The use of technology has long been used in the treatment of Neurodevelopmental Disorders including the Autism Spectrum Disorders [4]. Professionals are taking the help of the technologies including mobile phone apps to assist them in the screening [5], providing interventions [6] and follow up of the person on the spectrum. The technological advancements giving an opportunity for the most of developing countries to explore the feasibility of various technology supported interventions due to its cost effectiveness. A global technology based mobile hub of the sign- symptoms and challenging behavior of autism will help to track the time trends, sociocultural and regional influence. Mobile phones are playing a key role among these technological interventions. As for example, mobile based text message service has been proved to be effective in improving the treatment adherence of the various physical and mental health conditions and disorders [7,8]. In addition, technology can augment the communication as an assistive device; it helps in adaptation and modification for motor skills difficulties [4]. The mobile technology can be used and it has already been piloted in few instances to keep the caregivers updated and trained at their convenient time from their home. Moreover, the symptom of the children can be tracked using the mobile devices that can be completed by mobile apps, interactive text messages and voice calls. Another major support that technology can support is providing internet based cognitive behavior therapy [9] for caregiver's anxiety and depression that they develop in the course of the managing the children. However, technology based interventions are often implemented through the complex health care systems where more stakeholders are involved and various unpredictable factors can lead a promising pilot project to fail one. The initial success of a program does not ensure that the replication of that study will bring success in another setting due to the different local socioeconomic and cultural factors.

Social media sites can add a new dimension and flavor on management of autism. Facebook has explosive growth in the recent years and researchers consider it as a potential field to be effective medium to improve social skill training for Autism Spectrum Disorder

[10]. A national Facebook platform can be developed connecting the parents and allowing them to share their experience and get necessary tips from their peer group members. Interactive computer programs and virtual reality has shown promise in development of social and communication skills for the individuals with autism [11]. Most of the children with autism live in a rural area where no psychiatrist or expert psychologist available to support them. Hence if a telepsychiatry service such as a call center based on audio call is established to support the children with autism will be a great help. Many researchers considered that mobile phone based services have the potential to transform the mental health scenario [12] and it's time to consider technology to take care for autism.

References

1. Soron TR (2015) Autism, Stigma and achievements of Bangladesh. *J Psychiatry* 18.
2. Mullick MSI, Goodman R (2005) The prevalence of psychiatric disorders among 5-10 year olds in rural, urban and slum areas in Bangladesh: An exploratory study. *Soc Psychiatry Psychiatr Epidemiol* 40: 663-671.
3. Rabbani MG, Alam MF, Ahmed HU, Sarker M (2009) Prevalence of mental disorders, mental retardation, epilepsy and substance abuse in children. *Bangladesh J Psychiatry* 23: 11-52.
4. Cardon TA (2016) Technology and the treatment of children with autism spectrum disorder.
5. Wall DP, Kosmicki J, DeLuca TF, Harstad E, Fusaro VA (2012). Use of machine learning to shorten observation-based screening and diagnosis of autism. *Transl Psychiatry* 2: e100.
6. Goldsmith T, LeBlanc L (2004). Use of technology in interventions for children with autism. *J Early Intensiv Behav* 1: 166-178.
7. Domek GJ, Contreras-Roldan IL, O'Leary ST, Bull S, Furniss A, et al. (2016) SMS text message reminders to improve infant vaccination coverage in Guatemala: A pilot randomized controlled trial. *Vaccine* 34: 2437-2443.
8. Liu Q, Abba K, Alejandria MM, Sinclair D, Balanag VM, Lansang MAD (2014) Reminder systems to improve patient adherence to tuberculosis clinic appointments for diagnosis and treatment. *Cochrane database Syst Rev* 11.
9. Spek V, Cuijpers P, Nyklicek I, Riper H, Keyzer J, et al. (2007) Internet-based cognitive behaviour therapy for symptoms of depression and anxiety: A meta-analysis. *Psychol Med* 37: 319-328.
10. Gwynette MF, Morriss D, Warren N, Truelove J, Warthen J, et al. (2017) Social skills training for adolescents with autism spectrum disorder using Facebook (Project Rex Connect): A survey study. *JMIR Ment Heal* 4: e4.
11. Wainer AL, Ingersoll BR (2011) The use of innovative computer technology for teaching social communication to individuals with autism spectrum disorders. *Res Autism Spectr Disord* 5: 96-107.
12. Soron TR (2017) Mobile phone for mental health. *Ann Psychiatry Treat* 2.

*Corresponding author: Tanjir Rashid Soron, Cyberpsychology Research Organization, Dhaka, Bangladesh, Tel: 8801718827138; E-mail: tanjirSORON@yahoo.com

Received March 26, 2017; Accepted April 26, 2017; Published May 03, 2017

Citation: Soron TR (2017) Technology to Take Care of Autism. *Autism Open Access* 7: 205. doi:10.4172/2165-7890.1000205

Copyright: © 2017 Soron TR. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.