

Clinical Symptoms and Intervention Analysis of Autistic Patients——Based On Investigation of Autistic Patients in Beijing

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Abstract: Autism spectrum disorder (ASD) is a widespread developmental disorder characterized by social communication disorders, verbal and nonverbal communication deficits, narrow interest and behavioral stereotypes. Accurate diagnosis of ASD is the key to early intervention and also has a positive effect on patient recovery and family well-being. Increasing incidence has contributed to the importance of early identification, diagnostic assessment, and fact-based interventions. Based on the analysis of the clinical symptoms of autism, this paper analyzes the current status and shortcomings of current autism patients' intervention and treatment with the current situation of autism in Beijing, and also targets the current autism intervention policy and social fund. A review of the way the assistance is conducted. The paper is expected to provide some modest advice for the treatment and prognosis of autistic patients.

1. Introduction

From the study, autism prevalence in China is comparable to Western prevalence, new regional statistics were revealed. In Jilin City, 77 cases of autism were identified from a total population of 7258, equating to a prevalence of 108 per 10,000. In Shenzhen City, 21,420 children were screened and 35 cases of autism were identified, resulting in a mainstream prevalence of 42 per 10,000. In Jiamusi City, 16,358 children were screened, with 10 autism cases being identified, with a mainstream prevalence of 19 per 10,000.

ASD is a neurological and developmental disorder. Autism symptoms usually first appear at the age of 2 or 3 which will last throughout a person's life. Autism spectrum disorder is characterized by having difficulties in social-emotional reciprocity, nonverbal communication, and social interactions, especially in developing, maintaining, and understanding relationships.

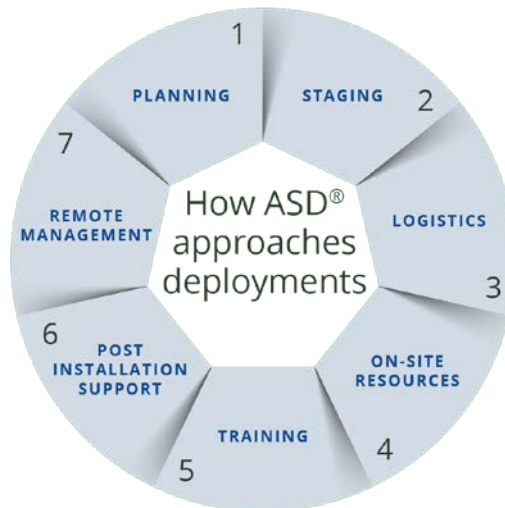


Fig. 1 The development trend of ASD

The Diagnostic and Statistical Manual 5 criteria for Autism spectrum disorder (ASD) provides levels of severity: level 1, level 2, and level 3. People with Level 1 ASD typically have limited but repetitive behaviors. People with level 1 ASD usually require support from others to help guide them with socially appropriate interactions. Without help, they might have problems with social interactions leading to apparent impairments, like having difficulties in communicating with others, responding to other's questions and so on. Difficulties with social interaction can leave persons with ASD socially isolated. They will lose interest in social interactions because they fail to have an appropriate response and they might not initiate a conversation. Limited behaviors are likely to hamper the independence of patients because they may have significant interference with switching to different activities as well as poor ability to organize and scheme activities [1].

Level 2 ASD severity refers to people with social communication problems needing "substantial support". Besides, the problems appearing in Level 1. They have significantly poorer abilities in both verbal and nonverbal communication. Persons with level 2 ASD will struggle with social interactions even when they are supported by other people. Persons with level 2 ASD, can experience anxiety when daily routines or environments change. Level 2 ASD is often characterized by repetitive behaviors.

Persons with Level 3 ASD significantly typically require substantial support. They have severe deficits in verbal and nonverbal communications skills. They rarely initiate a conversation or respond in socially appropriate ways with others. There can experience extreme distress when routines or environment change. Restricted and repetitive behaviors among Persons with level 3 ASD interferes with social functioning in all ranges [2].

2. Autism symptoms

People with autism do repetitive behaviors, for example performing the same movement for many times. Persons with ASD can experience hypo or hypersensitivity to stimulus from the environment. For example, persons with ASD can be sensitive to light, sound, or touch. They avoid and do not respond to social interactions. For communication, they use language in unusual ways. For instance, some people just say words instead of whole sentences; some people repeat several words or phrases for times. Persons with severe ASD can experience hyper-reactivity and hypo-reactivity to stimuli in their living environments. Persons suffering from hyper-reactivity are highly sensitive to sounds, sights smell and even touch. On the contrary, people suffering from hypo-reactivity less sensitive or insensitive to stimuli in their living environment. For example, persons with hypo-sensitivity may be unable to distinguish toxic smells from non-toxic smells; bitter from sweet, salty or sour. Or they may not be able to distinguish sounds or hear them at the same pitch as others. Because ASD

symptoms will accompany people the whole life, families caring for persons with ASD, especially in China face encounter severe, ongoing stress as they try to provide services for their children [3].

Childhood autism is a subtype of generalized developmental disorder, which is common in boys. It begins in infants and young children. It is mainly caused by different degrees of interpersonal communication disorder, narrow interest and rigid behavior. About three-quarters of the children with mental retardation have obvious mental retardation, and some of them have better abilities in some aspects under the background of general mental retardation. Among the following items 1, 2 and 3, there are at least 7 items, and 1. There are at least 2 items and 2. There are at least 1 item and 3 items respectively.

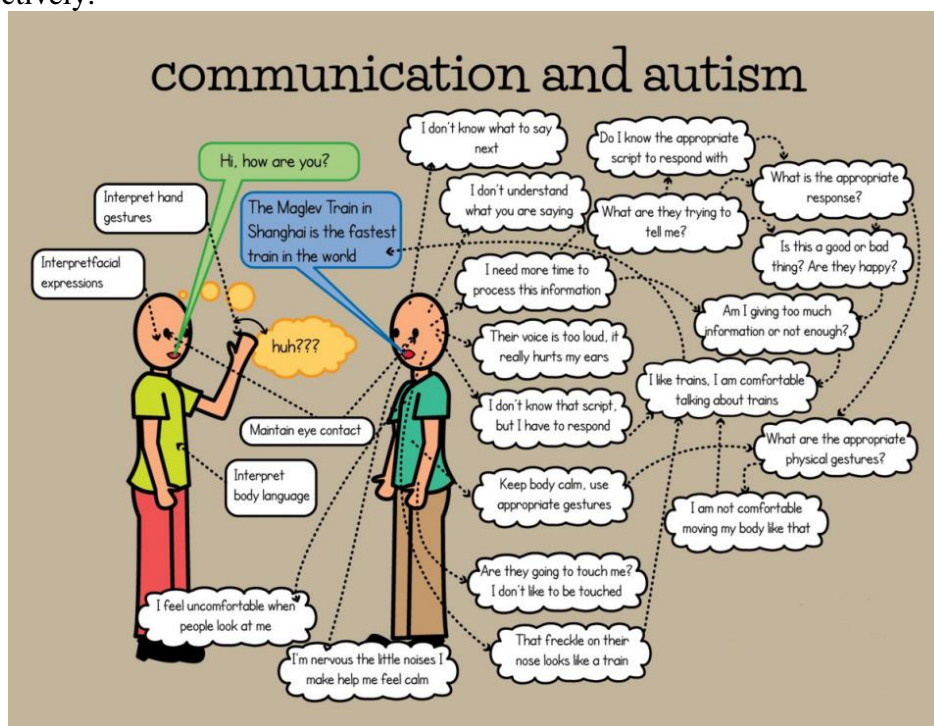


Fig. 2 Clinical manifestations of ASD

2.1 There are qualitative damages in interpersonal communication, at least 2

1) Lack of interest in collective games, loneliness, cannot resonate with the joy of the collective; 2) Lack of skills to communicate with others, and unable to establish partnerships with peers in a way suitable for their intellectual age, such as pulling, pushing and embracing peers as the only way of communication; 3) Self-entertainment, lack of communication with the surrounding environment, lack of corresponding observation and emotional response. 4) Not properly using eye-to-eye gaze, facial expressions, gestures and postures to communicate with others; 5) Will not play the role-playing game and imitate the social game; 6) When they are unwell or unhappy, they will not seek sympathy and comfort; they will not show concern and comfort to others when they are unwell or unhappy.

2.2 There are qualitative impairments in verbal communication, mainly due to the impairment of the function of language use.

1) The development of spoken language is delayed or cannot use language expression, nor can it communicate with others by gestures, imitations, etc. 2) Language comprehension is obviously impaired, often unable to understand instructions, unable to express their needs and pain, rarely asking questions, and lack of response to other people's words; 3) Refuse to change the stereotyped repetitive movements or postures, otherwise there will be obvious irritability and uneasiness; 4) Excessive attachment to certain smells, objects or parts of toys, such as special smells, a piece of paper, smooth clothing, wheels of car toys, etc., from which great satisfaction can be obtained; 5) Forced adherence to special and useless routine or ritual actions or activities [4].

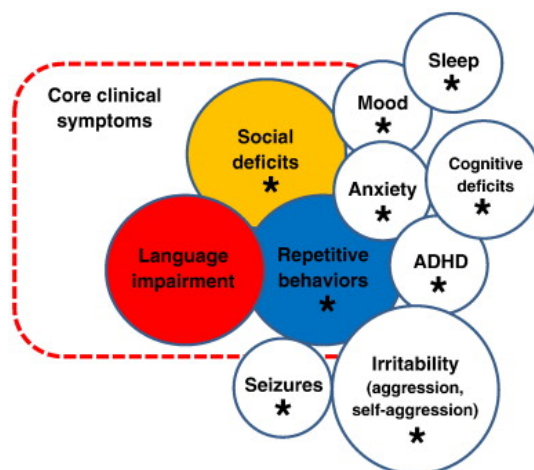


Fig. 3 ASD representation

3. Current status of autism intervention in Beijing

3.1 Scarcity of educational resources

As the capital of China, Beijing has the best educational resources and the best teachers in China. According to the survey, the number of autistic children in Beijing has exceeded 10,000. However, in Beijing, there is only one public institution for autism rehabilitation – The Beijing Autistic Children Rehabilitation Center -- and there are more than 160 children waiting in line for rehabilitation training. It takes three to five years for them to enter. Because of this delay, many parents began to choose private rehabilitation institutions to take their children there for treatment. In response, many families try to teach their children at home. Currently, there are not any training classes for parents seeking assistance in educating their autistic children. To fill this gap, families turn to the internet for information or create mutual support networks with other families struggling with the same issues.

3.2 Autistic children's educators are underpaid and not properly trained

The main reason for the scarcity of educational institutions is the shortage of teachers. Although the tuition fees for ASD services are high, the income of teachers at rehabilitation institutions is very low, typically 4,000 yuan per month, which is lower than the average wage in Beijing, 6,906. As a consequence of low salaries, few people choose to be an autistic rehabilitation teacher. As a result, there is a great shortage of talents in this industry.

In order to preserve budgets, many institutions recruit large numbers of interns for a fixed-post internship, to work with formal rehabilitation centers. The workload is the same. But the treatment is very low. Many interns do heavy work, but they only get more than 1,000 yuan. But these interns, in the process of internship, will be discouraged from working in the industry, because the heavy work load and meager income are not proportional [5]. Given these constraints, many teaching professionals will not choose to do this job after their internship, and some even quit before their internship is over.

Not only interns but also regular teachers have low salaries. Teachers who have worked for six years earn about 4,000 yuan. But the average wage in Beijing is 6,906 yuan. Few salaries lead to a serious shortage of autistic teachers. In China, an autistic rehabilitation teacher requires to take courses in Applied Behavior Analysis. ABA is a teaching strategy that is designed to improve the behavior of important social significance, and to formulate relevant strategies by studying the relationship between environment and behavior. Applying behavioral analysis first evaluates the functional relationship between target behavior and environment, which is very useful for helping autism recovery. But in order to find more teachers, many institutions have lowered the threshold of recruiting teachers to the level of only learning kindergarten teacher's lesson.

The number of ASD specific organizations in China is dwarfed by the number of people with ASD in China needing services. According to Dehua Guo, the Secretary of Committee of ASD of the association of the mentally disabled and their relatives in China, there are less than 3,000 ASD intervention organization in China. The teachers in most organizations have only regular education background and received limited training on how to serve persons with ASD in China. The impact of lack of public support to the ASD population is huge. This directly impacts the availability of treatments for people with ASD and challenges many families. This pressure it lays on families also stigmatizes persons with ASD. Moreover, without sufficient government regulation and help, the quality of treatment is not always guaranteed and vulnerable to fraud on the part of private organizations.

3.3 Autism patients have difficulty in education and have difficulty in employment after rehabilitation

Because autistic children are vulnerable, it is difficult for them to open their hearts to a person. Many of them collapse and refuse to communicate with the outside world when they find that the people who have accompanied them for a long time but no longer appear in their lives or take care of themselves. Many of them become irritable, silent and even refuse to engage in social interaction or participate in activities. Some of the children who are in the final stages of treatment and can have a brief conversation returned to their original state and even become more serious because of the resignation of the teacher.

The pressure faced by autistic child rehabilitation practitioners is difficult to quickly relieve or even become more and more serious, because there will be fewer rehabilitation practitioners, and the wage problem is difficult to raise in a short time as well since it has become an industrial problem. Many institutions charge intermediary fees and part of the money for parental education is given to factories to make special and unique educational tools for children. So, teachers can be given very little money. There are only two ways to raise therapists' salaries. First, parents need to pay more money, or the government needs to come out and manage the institutions. But for now, the second method is difficult to implement. The Chinese government has not dedicated the resources necessary to support the education and care of persons with ASD. The government may believe that parents should provide services of special needs children. So, the state's current policy for families with autism is to provide a subsidy to them. In some city like Shanghai and Beijing, each family can get 3,000 yuan.

3.4 Autistic people are vulnerable to social discrimination

Another challenge is that persons with ASD face is social discrimination and this stigma also has a negative effect on government efforts to provide services to persons with ASD. The only way to receive government fund for ASD is to apply for a disability permit, which some parents are reluctant to do given the stigma associated with being disabled in China. While it is easy to apply for a permit, it is hard to discard one. Parents are worried that if their children are recorded as people with mental disorders, they may be subject to special regulations and restrictions that will follow them throughout their life. Additionally, cultural and social discrimination hamper the education of children with ASD. While attending schools is beneficial for children with ASD, as it trains their abilities to interact with other people, many children with ASD are rejected by schools not because of their lack of abilities but instead because of other parents' reluctance to share classes with children with developmental disorders [6].

Some organizations intentionally add classes for ASD, not for rehabilitation purposes but for increasing profit instead. This could have negative impacts on people with ASD and worsen the economic situation of the families. Some unregulated organizations even threaten the safety of children with ASD. For example, it was reported that Beijing Senxi Education was accused of abusing children because they treated the children with ASD violently and impatiently during unprofessional training. Other desperate parents are willing to try "folk methods" or "new treatment" including traditional Chinese medicine, diet-therapy, chikunga, and other machines. In addition, the

direct result of the lack of public resources is the boom of the private sector, to which the burden of meeting the huge demand for treatments falls on. The situation of private section is further explored below.

4. Government support in Beijing, China for persons with ASD

4.1 Government legislation to assist autistic patients

Government support is necessary for people with ASD. Depending on the place on the spectrum on which they fall, people with ASD often require life-long supports including physical therapy, occupational therapy, basic education, and income support such as pensions, which are costly. For example, expenses per year for ASD services in the United States is about \$100,000 in New York, USA or \$120,000 HKD Hong Kong, China. This economic pressure is unaffordable for many families, not to mention the difficulties of finding resources such as job opportunities for people with ASD. Thus, in many countries, people with ASD rely heavily on public resources.

In China, there is legislation and government notices that provide support for mental disorders like ASD; they are, however, scattered and not specific. According to the Constitution of China, article 45. "The State and society help make arrangements for the work, livelihood and education of the blind, deaf-mutes and other handicapped citizens."

The government association directly responsible for persons with ASD in China is the "China Disabled Person's Federation" (CDPF). China Disabled Person's Federation is a legal people's organization approved by the State Council of the PRC comprised of disabled people, their families, and advocates. CDPF is the principal national organization for all people in China with various disabilities. According to the Law of the People's Republic of China on Protection of Disabled Persons Article 8. "The China Disabled Persons Federation and its local organizations shall represent the common interests of disabled persons, safeguard their lawful rights and interests, unite, educate and serve them. China Disabled Persons' Federation and its local organizations shall, in accordance with law, regulations and its constitution or as commissioned by the government, conduct work for disabled persons and mobilize different sectors of society in developing the undertakings for disabled persons. "In Beijing, children from birth to six years can receive ¥ 48,000 per year from CDPF in Beijing for training and rehabilitation purposes. To receive this, children should be diagnosed with ASD, apply for a disability permit, and go to intervention organizations approved by CDPF.

4.2 Social welfare organizations set up foundations

The private sector for Autism related services in China is provided largely by NGOs. The Beijing Disabled People Union, normally called BDPU, provided a list of non-government organizations that provide autistic services in Beijing in 2017. According to list, 46 centers/organizations/institutions that are assigned by BDPU as designated agencies in Beijing are capable of assisting autistic patients receiving relevant treatments. Nearly all of them offer outpatient appointment and services in full-time, which give patients a variety of institutions to choose.

Foundation is another form of social support to people with ASD. Foundations are started by both government and private organizations and funded by donations from private companies and individuals. An example is that China Social Welfare Foundation, a national public-raising foundation started by Ministry of Civil Affairs, has a special fund named Autistic children rescue fund. This fund aims to improve life of people with ASD through art such as providing free trainings with art-related method. China Women's Development Foundation, an organization under All China Women's Federation, also organizes services including diagnosing, therapy, and training for parents and raising social awareness. Moreover, non-governmental organizations also volunteer to help. For example, Beijing Qingai program planned to provide 1000 sets of Picture Exchange Communication System cards for people with ASD.

5. Conclusion

ASD is a group of neurodevelopment-based extensive developmental disorders characterized by social communication barriers, verbal and nonverbal communication deficits, narrow interest and behavioral stereotypes, and is divided into subcategories based on symptoms and severity, and Clinical characterization varies. However, there is currently no national ASD epidemiological data in China, and it is impossible to understand the incidence of various subtypes of ASD. Therefore, it is necessary to increase publicity to raise awareness of the harmful effects of ASD on children's development, increase funding for ASD research, conduct ASD epidemiological surveys nationwide, and provide basic data support for the government to develop relevant conservation policies and funding plans. Let the society know more about and care for people with autism.

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