

Parental Attitudes on Autism Spectrum Disorder Development Among Children in Malaysia: A Review

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Abstract

Autism Spectrum Disorder (ASD) is a neurodevelopmental condition that has been increasingly recognized worldwide, including in Malaysia. However, there remains a gap in understanding the prevalence, parental attitudes, cultural influences, and the role of knowledge and awareness in shaping societal acceptance of ASD. This review aims to describe the prevalence of ASD among children in Malaysia, determine the role of parental attitudes in the developmental outcomes of children with ASD, examine the impact of cultural beliefs and social norms on parental attitudes, and explain how parental knowledge and awareness influence their acceptance of ASD children. Existing data shows that the prevalence of ASD in Malaysia is rising, partly due to increased awareness and improved diagnostic tools. It was recorded that 1 in 625 Malaysian children had ASD. Studies show a substantial increase in diagnosed cases, particularly in urban areas such as Selangor. High parental stress, lack of coping mechanisms, and financial burdens contribute to poorer developmental outcomes, thus, positive parental attitudes are associated with better social skills and emotion regulation in ASD children. In Malaysia, traditional and religious beliefs often contribute to stigma, leading to misconceptions about ASD being linked to karma or supernatural causes. This discourages parents from seeking early intervention and support. Research suggests that higher awareness levels are associated with earlier diagnosis, better intervention outcomes, and reduced stigma.

It also improves parental understanding and support for ASD children.

Keywords: Attitude, Autism Spectrum Disorder, Children, Parental

Introduction

Autism Spectrum Disorder (ASD) defined as a lifelong neurodevelopmental problem that usually begins during infants and progress until adults. People who are diagnosed with ASD often have problems with their social communication and interaction, and with repetitive behaviors. This neurodevelopmental condition will affect on how they perceive and engages with others which then lead to difficulties in social interaction and communication that caused by differences in the brain [1]. The behaviors that exhibited by the people with ASD can be vary significantly from person to person. However, individuals with autism often share certain characteristics, including restrictive and repetitive behaviors, interest, and activities. They may also exhibit repetitive motor movements, such as hand flapping or arranging objects in a specific order. Additionally, they often experience challenges in social communication, engage in repetitive actions, face delays in learning, and may have unusual sleeping patterns, among other difficulties [2]. They also may develop other related characteristics such as delayed in language, movements and delayed in cognitive skill. They also known for their hyperactive, impulsive, and inattentive behavior, anxiety, stress, and excessive worry [1].

According to World Health Organization, ASD prevalence has been

arising where it shows that 1 in 100 children were affected worldwide [3]. However, in Malaysia the exact number remains uncertain due to underdiagnosis, lack of awareness, and cultural perceptions surrounding neurodevelopmental disorders. The reason for this also including due to no official registry or no local study of prevalence of autism. There are significant gaps in Malaysians' understanding of ASD, with reports indicating a lack of awareness and exposure to autism. The limited knowledge can contribute to negative perceptions and attitudes toward individuals with ASD and their families [4]. Understanding ASD prevalence and its impact on children and families in Malaysia is essential for improving early intervention strategies and support systems. Children with ASD face various challenges that impact their daily lives, education, and social relationships. They will struggle with verbal and non-verbal communication, sensory sensitivities, and adapting to structured environments. These challenges can make it difficult for them to integrate into mainstream education and social settings [5]. Families of children with ASD also experienced emotional, financial, and society pressures, particularly due to high cost of therapy, the limited availability of specialized education and the stigma associated with developmental disorders [6].

Parental attitudes are important in shaping the developmental progress in children with ASD. Parents who have a positive and accepting outlook are more likely to seek early interventions, provide emotional support, and encourage their child's potential. Conversely, misconceptions, denial, or stigma may lead to delayed diagnoses and limited access to necessary interventions [7]. In Malaysia, cultural and societal norms significantly influence parental perceptions of ASD. Some of them review ASD as a religious or supernatural lens, attributing it to spiritual causes rather than a medical condition [8].

Another key factor that affects parental attitudes is their level of awareness about ASD. Parents who are well-informed

about the condition are more likely to accept their child's diagnosis and seek appropriate interventions. This study aims to explore the prevalence of ASD among children in Malaysia and examine the impact of parental attitudes on their developmental outcomes. Additionally, it will assess how cultural beliefs and societal norms shape parental perceptions and how different levels of knowledge influence acceptance and support for ASD children. This study hopes to contribute to the development of more effective awareness program, policies, and interventions to support families of children with ASD in Malaysia.

Role of parental attitudes in the development outcomes among children with ASD in Malaysia

Not all parents interact in the same way with their children with autism spectrum disorder (ASD). Parents' positive attitudes and psychological well-being are crucial in supporting the development of children with developmental disabilities [15]. Parent with ASD children act differently as compared to parent with neurotypical (NT) child (normal child). Parental attitudes play an important role in improving the quality of reciprocal social, enhancing language and behavior analysis. other than that, insufficient parental warmth and a strained parent-child relationship have been associated with difficulties in children's social and emotional functioning [16]. Certain parenting practices, such as parental control, have been linked to increase externalizing behaviors in autistic children.

A study by McRae (2018) discovered that a parenting approach involving harsh and disengaged interactions, inconsistent discipline, corporal punishment, and insufficient monitoring and supervision predicted increased child externalizing behaviors [17]. Additionally, parenting practices involving criticism and neglect of the child were linked to higher externalizing behaviors in autistic children. Externalizing behavior refer to actions that can be

challenging for others such as aggression, non-compliance, tantrums [18]. Thus, other parenting approaches, such as mindful parenting, have been linked to lower externalizing behaviors in autistic children. Five studies have found that greater levels of mindful parenting were linked to reduced child externalizing behaviors. In that study also concluded that mindful parenting can be a new intervention to support the autistic children [19].

There is a study revealed that parents with children who has autism spectrum disorder (ASD) facing high levels of stress, anxiety, depression, feeling of being isolated and low quality of life [31]. Thus. It can impact the parental coping mechanism which lead to less effective parenting strategies. Dealing kids with autism can be frustrating especially when the parents do not master in coping mechanism. Coping mechanism requires the parent to attend the appointment with the healthcare experts, therapist and specialist which means that that they need to sacrifice their work routines and well-being which may lead to self-doubt, depression, and anxiety [20]. In that journal also stated that, this is the critical time for the family member to give the support system to the parents with ASD [20]. Financial stress also could be main sources of stress in parent with ASD child [21] due to high cost that associated with therapies, education, and medical expenses [22]. Barroso (2018) stated that parenting stress has been identified as the primary factor predicting behavioral problems in children with autism.

Early study shown that autism children have lack of attachment behavior and have a failure in bonding with their parents. However, there are still Asd children that that do not have interpersonally impaired, and these children believed to have a secure attachment relationship. Moreover, children with autism may rely on their caregiver as a secure base for exploring their surroundings and seeking comfort when they feel startled or afraid [16]. Studies by Strange Situation

Procedure (SSP) shown that 50% of ASD children with secure attachment seek attention with their mother when they are under pressure such as separation, controlling themselves for difficulties in controlling eye contact and flapping hands [23]. Kubo, N (2021) in his article, stated that after reviewing 16 studies examining attachment in children with ASD, 53% of the children with ASD developed a secure attachment to their caregiver but the proportion of secure attachment in children with ASD was significantly lower compared to children without ASD. One of the reasons to this is that the parent could not understand their child attachment needs that will be expressed in a typical way in child with ASD [24]. According to this attachment theory, a caregiver's responsiveness and sensitivity to a child's emotional cues plays a crucial role in shaping the quality of the child's attachment. In other hand, parent also must show their secure attachment toward their children as it helps in language comprehension and joint attention.

Intervention program such as The Circle of Security Parenting (COSP) has been shown that it will improve the withdrawn/depressed and aggressive behavior in children with ASD [24]. Malaysia also has slowly started this program that was introduced by Klinik Kenit. They focused on the intervention of early childhood development in Malaysia and one of the interventions was to introduce the COSP [25]. 6 studies had proved that autism children with secure attachment and more sensitive parent they have a better social interaction, able to develop empathy and popular among their peers.

Emotion regulation in ASD children. Emotion regulations define as ability of someone to inhibit inappropriate behavior despite strong negative or positive emotion, ability to self-soothe themselves from any psychological arousal, refocus attention and how to organize for coordinated action [26]. ER is important in regulating and

inhibiting behaviors and prevent from overexpression. However, children with ASD have a poor ER and studies showed that they have emotion dysregulation due to impaired cognitive appraisal of emotion-eliciting stimuli [27]. As compared to normal children autism kids has a higher tendency to have anxiety as they have a hypersensitivity to sensory stimuli and poor coping skills. As a result, they tend to overreact or having a tantrum or meltdown over a simple situation and sensitive to a new environment. Beck (2020) shared that there are several factors that contributing ER in ASD among children including alexithymia, deficits in theory of mind, social skills, cognitive deficits, limited abstraction capacity and cognitive function, low inhibitory function, baseline hyperarousal and inflexibility.

Parent co-regulation plays an important role to help their children with ASD to regulate emotions. It includes support in fostering their child's emotional development through motivational or emotional scaffolding [28]. Study by Damian R (2024) showed that ER problem in ASD children can be improved by non-pharmacological therapy that will be conducted by the parent. Method use in the non-pharmacological interventions is cognitive behavioral approaches that shows a feasible improvement of ER problem in child with ASD. In studies, showed that non-pharmacological interventions for ER development in ASD produced a significant value that suggesting the improvement following interventions [29].

The impact of cultural beliefs and social norms in Malaysia on parental attitudes toward the development of children with Autism Spectrum Disorder (ASD)

Cultural beliefs or stigma of public have been the hardest social conditions for family with physical or mental disability to deal with. The society has created a perception towards the family with disability member that associated with guilt, shame,

or humiliation. It can lead the family to hide their autism children from the public to prevent from being judged harshly [33]. Stigma not only exist in Malaysia, but it also exists in all cultures towards parents of children with ASD. Family with autism children will have a different type of public stigma since the symptoms may be easily recognize and the child appearance itself shows a significant sign [30].

Based on cross-cultural study, cultural beliefs of the society will affect the way families, professionals and communities understands developmental disorders [32]. It is believed that the stigmatization and the cultural beliefs occur due to lack of knowledges understanding the autism as people mostly relay on stereotypes, dichotomize, and will behave in a discriminatory way [34]. However, in recent studies showed that increase in number of autism diagnosis which represent that society has been aware about autism. Society tends to depend on social media information to get the information on autism [35]. According to Prochnow (2014), social media describe autism in various ways including "magical/savant, 'different'/quirky, undiagnosed/unlabeled, and realistic portrayals" which portrays that social media failed to describe autism in a good way [35]. This might be the reason why there are still stigmatization and discrimination towards autism.

Also, there is a study that was conducted in Malaysia showing that our public had a moderate level of knowledge on autism and some still has negative attitudes toward the autism child [36]. In the same study, it had been stated that Malaysian people only heard about autism, but they do not understand the characteristics and behavior of the autism that could lead to discrimination and stigmatization. Study made in Malaysia in the community of Selangor had shown that they have a bad perception toward autism. It shows that, 83% of the community seen

people with autism as a threat and describe them as being mad or lunatic [36].

Majority of Asian countries had a negative perception on autism where they relate then to karmic sins from the previous life or their parents' sins [37]. In Malaysia, there is a study found that our society believed that autism is related to karma or mysticism [38]. In interview conducted in Indonesia also showed that their society also believed that autism associated with traditional cultural beliefs such as karma, behavior during pregnancy and God's plan, which not usually found in western countries [39]. Furthermore, Malaysia is now having a collectivist culture environment where the people who are different from the normal people will be rejected and this also apply to Autism. People in Malaysia who are in that believes will distance themselves from individuals who do not fit the societal norms such as autism [40]. Other than cultural beliefs, parents with autism children also facing stigmatization and discriminations especially when they bring their kids into public.

Effect of knowledge and awareness about ASD among parents in Malaysia towards their attitudes and acceptance in children with ASD

Adequate awareness and knowledge among parents and the community regarding ASD is important especially for earlier recognition, early diagnosis and most important is intervention [4]. However, in Malaysia, many cases of ASD go unrecognized and do not receive adequate attention. There are significant gaps in the understanding of ASD among Malaysians. Reports also indicate that Malaysians still have limited knowledge and exposure to autism. This lack of awareness can contribute to negative attitudes toward individuals with ASD and their families [4]. A study also showed that due to low level of awareness and knowledge about ASD in Malaysia had

led to misconception where they treated ASD children as a mental problem instead of neurodevelopment problem [41].

Research has also indicated that parents have limited awareness and insufficient knowledge about the signs and symptoms of autism. In addition to recognizing these signs, many parents are unaware of the diagnosis and treatment options available. As a result, delays in identification and intervention occurs, leading to less favorable outcomes for individuals with ASD [42]. A study conducted among the community in Dengkil, Malaysia, revealed that only 47.4% of respondents had a good understanding of autism [43]. A study conducted in Malaysia revealed that, most of the respondent of that study were aware of autism, but not all could identify autistic children based on their appearance and often mistook autism for hyperactivity in children [44].

Awareness and knowledge are very important in early diagnosis of autism. Early recognition and diagnosis enable parents to create a well-organized and effective treatment plan, alleviating stress by allowing them to consult the appropriate doctor and gather accurate information about the condition [4]. Diagnosis of autism can be very difficult as they cannot be detected by direct test such as blood test or biomarkers in the body. Thus, to diagnose ASD is only by observing the child's behavior (May T et al., 2017). Another key aspect of ASD is that detecting early risk signs and implementing intervention within the first year of life greatly enhances the effectiveness of therapy [45]. Parents who are informed about ASD can recognize early developmental red flags, such as lack of eye contact, delayed speech, repetitive behaviors, and social difficulties. It can reduce the misconceptions and stigma among public. Furthermore, early diagnosis will allow access to therapies that support communication, social interaction, and motor skills development. This could reduce the kid's frustration and improve their quality of

life [46]. Other than that, the early diagnosis and intervention have been proved to achieve better social outcomes and greater independence in their adulthood [49]. Delays in autism diagnosis can deprive children of essential support and therapy, potentially hindering their social skill development and leading to communication or behavioral challenges [4].

Knowledge and awareness also will affect the attitudes of the parents towards their autism child. A study was conducted in Malaysia revealed that there is a significant relationship between greater awareness and positive attitudes towards ASD. The finding also suggests that increased awareness of ASD is strongly linked to higher levels of knowledge about the condition, which, in turn, is significantly associated with a more positive attitude toward ASD. The participants of the study stated that social media has played an important in spreading the information on ASD among children which it portrays the accurate knowledge and transforming that knowledge into positive perception of ASD [47]. In other hand, people in Sarawak also have increased their awareness as a study conducted there and it shows that parents who live with ASD were willing to pay for their child intervention such as Applied Behavior Analysis (ABA), occupational therapy (OT), art therapy and many more. They also have the effort to do some research reading on the internet to learn about the ASD interventions that concerning their child's condition. Their knowledge and level of awareness has created a positive attitude toward their ASD child which been the most influence factor in intervention success in creating a better behavior among child with ASD [48].

Furthermore, higher level of knowledge and awareness about ASD among parents and society can significantly reduce the stigmatization and discrimination against children with autism. A lack of awareness about autism contributes to delays in treatment and the

stigmatization of autistic individuals. As a result, they may face difficulties in accessing healthcare services and fully engaging in society. Studies have shown that greater awareness of ASD is linked to lower levels of stigma. Increased awareness among public may help reduce stigmatizing attitudes, leading to less social isolation and improved well-being for autistic individuals (Hashim et al., 2021). Reduce level of stigmatization and discriminate towards children with ASD will reduce the burn faced by the parents. They can stop the self-stigma where they put the blame on themselves for what happened to their child. As a result, parents can join the society and public without having problems (Shin Chan & Bun Lam., 2018). Therefore, greater understanding and awareness of a particular disorder, such as ASD, can positively influence people's attitudes and behaviors, helping to reduce fear, avoidance, and discrimination.

Discussion

Prevalence of ASD in Malaysia

Autism Spectrum Disorder among children has been reported to be increasing globally. According to The National Autism Society of Malaysia (NASOM), usually the symptoms of autism will appear during the first three years of the children's life. However, not all parents aware of the symptoms and usually they found it when the children are at least 6 years old [9]. It also was found that boys have four-time risk in having (ASD) as compared to females. It is proven where in 2020 there was 43.0 boy has autism per 1000 as compared to girls who has autism which is 11.4 per 1000 [10]. The World Health Organization (WHO) estimated that 1 in 100 children diagnosed with autism globally which can be detected early in childhood depending on the level of awareness of the parent [4]. However, the number may be different on each different country. The prevalence of it may be influenced by several factors such as how the research

was conducted on that region, culture, and environmental influences [12]. For example, according to Centers of Disease Control (CDC), the prevalence of the ASD varied among sites of the study where 12.7 children have autism per 1000 children in Utah, meanwhile, in California 46.4 children has autism [10]. The prevalence of autism in the United States has risen from 2 in 44 children to 1 in 36 children by 2020 [11]. Similarly, data from the Australian Bureau of Statistics (ABS) Survey of Disability, Ageing, and Carers (SDAC) estimated that in 2015, approximately 164,000 Australians were diagnosed with autism, equating to an overall prevalence rate of 0.7%, or roughly 1 in 150 individuals [2].

In Malaysia, about one in every 625 Malaysian children has autism based on local survey reported by Ministry of Health on year 2005. However, NASOM has reported that the number of registered autism children in their organization has been increasing. It is believed that awareness among Malaysian on Autism Spectrum Disorders has been increased evidenced by the increased of registered and number of cases reported and seeking medical attention [13]. In ten years, Malaysia able to increase the number of registered autism children from 6,991 to 53,323 in 2023. With the numbers, government has introduced various programmed and initiatives to create autism centers throughout the countries [50].

A study on prevalence of autism among school age children was conducted in Malaysia and it shows that there is increase in children diagnosed with autism in 5 years starting from the year 2018 until 2022. The study was conducted in three school levels which are preschools, primary schools and secondary schools which includes 13 states and 3 Federal Territories and only government schools were involved. The number of schools attended by children with autism has steadily

increased each starting from year 2018 to 2025. In 2018, 9,361 students were enrolled in the government school with special needs meanwhile in 2022 there were 20,121 children with ASD enrolled in government school with special needs (Fig. 1). In that study, it was shown that the prevalence of the autism in children increase 50% from 2018 to 2020 meanwhile from year 2020 to 2022 there was 43% increase in the prevalence. Selangor is the only state with highest average number of school children with autism over a 5-year period with 16,949 numbers of student with autism meanwhile Labuan has the lowest number of it. It was believed that Selangor is one of the most developed cities in Malaysia, hence it has a better level of awareness and knowledge on autism among the parents there [2]. As a result, they have more GDP as compared to the other state. Cities with higher income will have more medical services and advanced learning center on autism which lead to increased awareness in those states. Besides, respondent in urban area have a better understanding about autism and has more positive attitudes towards them (Fig. 2).

Other than that, Selangor is categorized as an urban area with multiple public and private medical center that can provide various interventions programs for ASD children [14]. Furthermore, based on the same study, it is shown that there are higher amounts of children who has autism in primary school that aged between 7 years old until 12 years as compared to children below 6 years old and secondary school. As stated, autism is diagnosed in early childhood however at that age they usually get support and education under Individualized Education Program (IEP) and it is usually run by private institution. After the age of early childhood, they complete the IEP and enter the government primary school [2].

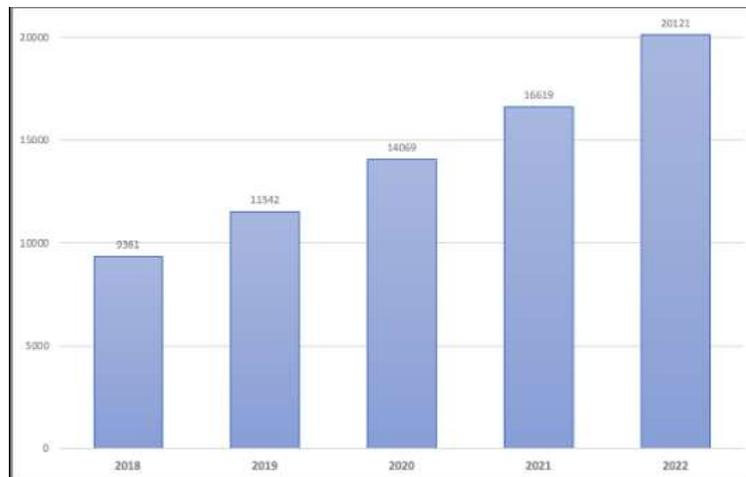


Fig. 1: Number of children with ASD enrolled in Malaysia public schools from 2018 to 2022

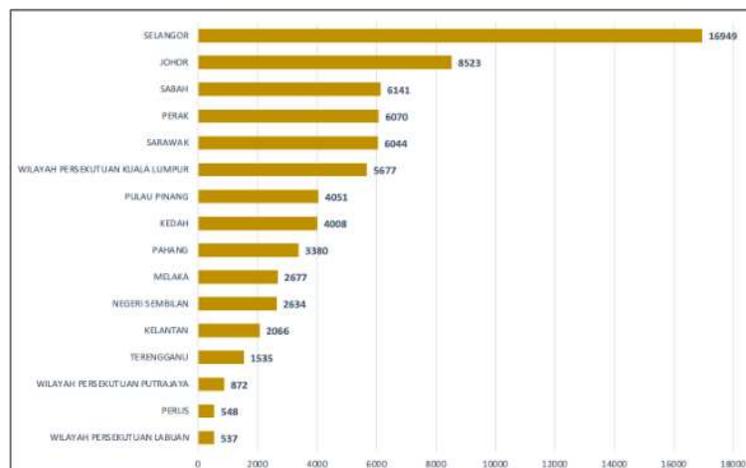


Fig. 2: Number of students with ASD by state in Malaysia from 2018 to 2022

Conclusion

This study aimed to explore the prevalence of Autism Spectrum Disorder (ASD) among children, specifically in Malaysia. In this study also focused on the impact of the parental attitudes, cultural beliefs, and awareness levels on the development of the ASD in children. After a thorough reading, finding indicates that prevalence of ASD among children in Malaysia has been increasing, which may

be attributed to improved awareness, better diagnostic tools, and increase in support services. However, there is still differences prevalence across different states, where the urban areas reporting a higher case, potentially due to greater access to healthcare and education. Parental attitudes play a crucial role in creating the developmental outcomes of children with ASD. Positive parental treatment, emotional support, and effective coping strategies

significantly contribute to better social interactions, emotional regulation, and adaptive behaviors in children. Meanwhile, stress, lack of knowledge, and negative parenting approaches can worsen the behavioral issues. Cultural beliefs and societal stigma strongly affect the parental attitudes towards their ASD child. Some of the communities in Malaysia still believe that ASD is related to supernatural causes or parental shortcoming which then lead to discrimination and reluctance to seek early intervention. In conclusion, addressing ASD in Malaysia requires a holistic approach that integrates scientific knowledge, community involvement, and religious perspectives. By combining medical interventions with Islamic values of compassion, patience, and social responsibility, we can create a more inclusive and supportive environment for children with ASD and their families.

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Conflicts of Interest

The authors declare that they have no conflict of interest.

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