Barriers to Implementing Equine Therapy for Autism Spectrum Disorder in Malaysia: Stakeholder Perspectives

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DOI: https://dx.doi.org/10.47772/IJRISS.2025.90400090

Received: 19 March 2025; Accepted: 31 March 2025; Published: 30 April 2025

ABSTRACT

Equine therapy (ET) has shown promise as an effective intervention for children with Autism Spectrum Disorder (ASD), yet its implementation faces significant challenges, particularly in diverse cultural and resource-limited settings such as Malaysia. This article examines the barriers to implementing equine therapy for ASD in Malaysia through the perspectives of key stakeholders, including ET coaches and parents. Qualitative data collected from interviews with seven respondents—comprising five parents of ASD children and two ET coaches—reveal multifaceted challenges. These include limited awareness of ET, high costs, weather-related disruptions due to the outdoor setting, and difficulties in managing ASD children during therapy sessions. Stakeholders also highlight the need for greater collaboration from community organizations to address these barriers. This study conducted in the central region of Malaysia, and highlighted the importance of developing cost-effective and scalable models for ET in the country, while advocating for policy support and public education to enhance its acceptance and accessibility. By identifying and addressing these barriers, this research aims to pave the way for more inclusive and effective therapeutic options for children with ASD in Malaysia and similar contexts. Keywords: equine therapy, autism, children

INTRODUCTION

Autism Spectrum Disorder (ASD) is a neurodevelopmental disorder that affects social communication, behaviour, cognition, and motor control (Srinivasan et al., 2018). The severity of ASD is categorized into three levels, ranging from mild to severe. Individuals classified as level 1 ASD, previously referred to as "high functioning" (ASD-HF), experience challenges in social interaction and language use. Level 2 is characterized by diminished or abnormal reactions to social overtures and deficits in verbal and non-verbal social communication skills, while level 3 is associated with severe impairments in verbal and non-verbal social communication skills, as well as very limited initiation of social contacts and a minimal response to social overtures (American Psychiatric Association, 2013).

The global prevalence of ASD is estimated 1 in 100 children (Zeidan et al., 2022), although there is no epidemiological data on ASD prevalence in Malaysia (Chu et al., 2023), reports indicate a steady rise in ASD diagnoses over the past decade (Aziz, 2022; CodeBlue, 2022). The increasing number of diagnoses highlights the need for trained clinicians, early intervention centers, and therapeutic options, including alternative therapies like equine therapy (ET) (Dawson & Gernsbacher, 2010).

Among complementary and alternative medicine (CAM) approaches, ET has demonstrated promising outcomes in enhancing social-emotional competence, self-regulation, and anxiety reduction for ASD children (Srinivasan et al., 2018). Research supports the effectiveness of ET in promoting positive behavioural outcomes (Soeed et al., 2020). However, challenges persist in implementing ET, particularly given the behavioural complexities of ASD children, who are prone to emotional dysregulation (Mazefsky et al., 2012). Qualitative research remains limited in understanding the lived experiences of ASD children undergoing ET (Ahad et al., 2021; Preston et al., 2021). Thus, this study will explore the challenges of ET for ASD children through qualitative case study. These interactions are known by many names, including but not limited to equine-assisted therapies (White-Lewis,

2020), equine-assisted activities and therapies (Pelyva et al., 2020), equine-assisted learning (Lietz & Napan, 2020), equine-assisted psychotherapy (Harvey et al., 2020). However, for the sake of clarity, any reference to a horse-related intervention has been referred to as equine therapy (ET) throughout this study.

Benefits of ET (Equine Therapy)

ET has been shown to be successful with a variety of target groups suffering from conditions included in the Diagnostic and Statistical Manual of Mental Disorders–5th edition (DSM-5) (American Psychiatric Association, 2013). Reported benefits include improvements in posture and muscular control (Buchanan & Higgins, 2023), and mental health-related benefits such as reduced anxiety in ASD children. The core psychosocial benefits of horse riding for ASD children and adolescents include stress reduction, enhanced communication, and improved psychological well-being (Zhao et al., 2021). Similarly, parents have observed an increase or emergence of positive behaviours and cognitive effects, such as a greater sense of responsibility, respect and independence (Buchanan & Higgins, 2023; Van der Steen et al., 2019), improved mood (Kalmbach et al., 2020), and an awareness of unfairness (Kemeny et al., 2022). In conclusion, ET has emerged as a promising intervention for children with ASD, offering physical, emotional, and social benefits.

Challenges of ET implementation

ET can be challenging due to the intimidating size of horses and the difficulty some individuals face in asserting themselves (Marchand et al., 2021), despite its significance, this aspect is seldom addressed in ET research (Almasloukh, 2022), due to the client population often includes vulnerable individuals, such as children or those with learning difficulties, obtaining consent can be complicated. Seery and Wells (2024) raise concerns and revealing that a proportion of ET practitioners hold minimal or no formal education in equine-related fields. Other than that, research has shown no consistent correlation between riding experience and the ability to accurately interpret equine behaviour (Rudd et al., 2022) or horse welfare (Bornmann et al., 2021), both of which are critical to ensuring human safety (Luke et al., 2022). Then, organizations like the Riding for the Disabled Association (RDA) offer primarily funded, ongoing programs, while corporate-oriented providers typically conduct shorter sessions, such as half- or full-day workshops tailored to workplace needs. These corporate sessions are generally more expensive and less likely to benefit from external funding (Wood et al., 2021). In this study, researcher looking at the challenges of ET implementation in Malaysia from the perspective of parents of the ET clients which is ASD children and the ET coaches.

METHODOLOGY

This study adopts a qualitative case study approach to explore the experiences of ASD children in ET. Data collection involved in-depth interviews and documents review. The researcher served as the primary data collection instrument. Participants were selected based on the following criteria: parents of ASD children (ages 5-12) who had attended ET sessions for at least three months, and ET coaches that guiding ASD children. Finally, total five parents of selected ASD children and two ET coach participated. Pseudonyms were used to ensure confidentiality.

FINDINGS

Fear of the Horse

From the parents' perspective, the fear of the horse was associated with the horse's large size and its imposing body structure, which intimidated some children with ASD. Parents expressed particular anxiety about the physical safety risks associated with the large size of the horses. Parent R1 specifically mentioned:

"Actually, it's so impressive because he likes the horse, but we are quite concerned that the horse size is quite big".

Parent R5 expressed this concern stating:

"She just afraid to feed the horse, as its teeth looks huge for her".

This concern is particularly relevant for smaller children or those who may be intimidated by the sheer size of the animal, which can lead to anxiety and potential safety issues.

Changes of Weather

From the parents and coach's perspective, changes in weather highlighted challenges such as horses becoming frightened during thunderstorms, sessions being cancelled due to rain, and the discomfort experienced by horses when exposed to frequent rainfall. Parent R5 express this concern that they need to arrive early but have to leave if it starts to rain:

> "If I come here, I will arrive early and if it rains, then I have to go back".

Adverse weather conditions can affect both the horses and the therapy sessions, limiting opportunities for children to participate. Weather conditions also pose a significant safety challenge. The ET coach highlighted the unpredictability of weather:

> "There's a thunderstorm out of sudden and then the horse is not easy, we have to hold the horse tightly and carry the children back to ground first".

Sudden thunderstorms can cause horses to become agitated and harder to control, increasing the risk of accidents during therapy sessions. Besides that, frequent raining days also caused discomfort of the horses. The coach noted:

"The only problem now is weather la, horse also get itchy if rain too often"

This means that the horses require extra care and attention during rainy seasons to ensure their well-being.

Managing ASD Children

From the ET coach perspective, the sub-theme of managing ASD children highlighted challenges such as managing aggressive behaviour and addressing a lack of cooperation during sessions. Aggressive behaviour in children with ASD further complicates the implementation of ET. The ET coach explained:

> "If the children are aggressive, we will recommend to not go on the horse first, example like parent R5 kid, she is abit aggressive, we take it slowly, do some ground activities without go on the house first".

Aggressive behaviours can startle horses and lead to dangerous situations for both the child and the handler. The coach noted that parent R4's child displays significant aggression:

> "R4's kid is very aggressive, when we start the session, he used to kick us, he used to pinch us, anything we give, he used to throw, steaming is very bad, and he moving front and back on the horse, some more he is big size right and on top of the horse, its challenging".

Additionally, for child of parent R5, the inability to manage strong interests led to disruptions:

> "There's one day, parent R5's child wants something that she really interested, when she saw that, she wants it, so we hide it, she tries to find it, it's a toy, so the whole session cannot continue".

Aggressive tendencies during therapy sessions can disrupt the environment and hinder progress for both the child and the therapy team. As such, children exhibiting these behaviours may need alternative therapeutic approaches until they can safely interact with the horses.

Lack of Financial Subsidy

From the parents' perspective, lack of financial subsidy emphasized challenges due to limited support from both

employers and government programs. The high cost of ET is another substantial challenge. Parent R3 noted that the therapy is expensive and they were only able to afford it because their company provided a subsidy:

> "To be honest, I think this therapy is expensive, I come here also because of my company willing to subsidize for two years, as long as related to therapy".

Parent R5 expressed the pricing concern:

> "The fees are a bit expensive, standard but cannot afford for most people, I also try to apply for zakat every year".

The cost of ET can be a barrier for many families, limiting access to these important services. This financial barrier restricts access for many families, particularly those without external financial support or subsidies. Without financial assistance or subsidies, the high cost of ET remains a significant obstacle to its broader implementation and accessibility.

Lack of Awareness Promotion

From the parents and ET coach perspective, lack of awareness promotion highlighted insufficient government efforts to promote awareness and a general lack of public understanding about ASD. Parent R4 mentions she did not know about ET until a friend brought it up:

> "I never even heard of equine therapy until a friend mentioned it. When I looked into it, I was amazed at how much it could help my child. I just wish I'd known about it sooner".

The ET coach highlighted that despite their operation since 2014, awareness remains minimal:

> "I think the main problem is we are lack of awareness, we are here since 2014, but the awareness is very less, hope we can get government support to boost awareness".

This lack of awareness limits the number of families and caregivers who might consider ET as a viable therapeutic option for their children with ASD. Increased visibility and understanding of ET through government support and public education campaigns could help more families access this beneficial therapy.

DISCUSSION

The large size of horses can be intimidating and pose physical risks to ASD children, this concern is also especially relevant for smaller children or those who may not fully understand the potential dangers associated with interacting with such large animals. While literature on negative ET effects is limited, cases of injury have been reported (Chang et al., 2018). To maximize the benefits and ensure the safety of ET, it is essential to provide thorough training for handlers, create detailed safety protocols, and tailor the therapy to meet the individual needs of each child. Weather conditions add another layer of complexity to the safe implementation of ET. The unpredictability of weather and its impact on the therapy sessions can cause horses to become agitated, increasing the risk of accidents during therapy sessions. According to Grandin (1997), a horse's temperament and ability to cope with stress are valuable indicators of its responses to external stimuli, horses with a nervous, excitable temperament are more fearful of new experiences compared to those with a calm disposition. There have to be a horse handler along with the ET coach and ASD children to ensure safety of both parties. Aggressive behaviours in children with ASD further complicate the implementation of ET. Children exhibiting aggressive behaviours can startle horses, leading to potentially dangerous situations for both the child and the handler. Horses are highly sensitive to inconsistency, agitation, and autonomic arousal, all of which can indicate a potential threat (Wharton et al., 2019). As such, ET centre have to assess each child's readiness for ET, and requires children to follow instructions and remain focused, which can be particularly challenging for those with ASD.

Another significant barrier to the widespread adoption of ET in Malaysia is the general lack of awareness about

its benefits and availability, this lack of awareness limits the number of families and caregivers who might consider ET as a viable therapeutic option for their children with ASD. Without adequate awareness, the potential benefits of ET remain underutilized. Anastasya et al. (2024) supported that a lack of public understanding of ET hinders its recognition and acceptance. Hence, increased visibility and understanding of ET through government support and public education campaigns could help more families access this beneficial therapy, as increasing public awareness and understanding of equine therapy is crucial to its recognition and acceptance in clinical settings (Anastasya et al., 2024). Then, high cost of ET is another substantial challenge, in the study by Kalmbach et al. (2020), parent reported being unable to afford continuous equine-assisted therapy for their child, while another faced challenges due to the site's distance. Similarly, in Malcolm et al. (2018) study, ET providers pointed to a lack of funding for interventions as ASD children transition into adulthood. In addition, the financial barrier restricts access for many families, particularly those without external financial support or subsidies. The cost of maintaining facilities, trained therapists, and the horses themselves contributes to the overall expense, making it difficult for lower-income families to afford regular sessions. Financial constraints can prevent many families from even considering ET as a treatment option for their children, despite its potential benefits. This is in line with Kawamura et al. (2024) opinions of the cost and accessibility of ET may restrict this type of therapy to certain populations. Apart from that, Kalmbach et al. (2020) reported that some parents felt ET were too slow-paced or restrictive, limiting their child's ability to fully benefit. However, these challenges were not observed in the current study. In conclusion, while ET offers promising benefits for children with ASD, several challenges hinder its widespread implementation in Malaysia. Enhancing safety protocols and training, increasing public awareness through government support and educational initiatives, and providing financial subsidies or support can help make ET more accessible and beneficial for children with ASD. By overcoming these barriers, ET has the potential to significantly enhance the social-emotional competence and overall well-being of ASD children in Malaysia.

CONCLUSIONS

This study highlights key challenges in implementing ET for ASD children, including safety concerns, behavioural difficulties, financial barriers, and lack of public awareness. Addressing these obstacles through policy support, financial subsidies, and enhanced public outreach can expand ET’s accessibility. Future research should incorporate perspectives from ET service providers and policymakers to offer a more comprehensive understanding of the field.

Ethical Statement

This study was conducted in accordance with ethical guidelines and received approval from Ethics Committee for Research involving Human Subjects of University Putra Malaysia (JKEUPM), approval no: JKEUPM-2024-062.

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