

A SYSTEMATIC REVIEW OF INDIVIDUALS WITH AUTISM IN THE HEALTHCARE SYSTEM: EXPERIENCES OF HEALTHCARE WORKERS, INDIVIDUALS WITH AUTISM, AND THEIR PARENTS

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Abstract: *Aim: Individuals with autism face numerous obstacles in obtaining healthcare services. This systematic review examines the barriers and facilitators encountered by individuals with autism, their parents, and healthcare providers.*

Method: *A systematic search of published literature on this topic was conducted for the period between 2018 and 2023, resulting in 152 relevant papers. According to previously defined inclusion criteria, the final analysis included 24 studies. The selected studies implemented different study designs – qualitative studies (n = 9), non-randomised studies (n = 2), mixed methods studies (n = 10), and quantitative descriptive studies (n = 3). The participants in the included study samples consisted of 2,190 individuals with autism, 1,967 healthcare workers, 821 caregivers, and 193 control participants.*

Results: *The barriers identified were grouped into three categories - personal, professional, and systemic, while the facilitators emphasised adaptations in spatial and procedural organisation, communication strategies, professional education, and interdisciplinary collaboration.*

Conclusions: *Practical implications highlight the need for targeted autism-related training for healthcare workers.*

Keywords: *autism, barriers, facilitators, healthcare system, healthcare professionals*

1. INTRODUCTION

Autism Spectrum Disorder (ASD) is a neuro-developmental condition with lifelong communication and behavioural challenges (World Health Organisation, 2022). The prevalence of ASD is estimated at 1%, with significant regional variation (Zeidan et al., 2022). Individuals with ASD often experience physical and mental health comorbidities, including anxiety, depression, obesity, and sleep disorders, at rates that are significantly higher than the general population (Micai et al., 2023).

Numerous factors contribute to explaining the poor health conditions of individuals with autism. In addition to biological vulnerability, unhealthy eating habits, limited physical activity, obesity,

and the adverse effects of medications, many authors point out that healthcare systems worldwide do not provide timely and adequate healthcare for patients with autism (Bishop-Fitzpatrick & Kind, 2017; Yoo et al., 2022).

Individuals with autism from different age groups face numerous barriers to obtaining healthcare services. Some of those barriers are related to the characteristics of autism. This primarily refers to difficulties in communication, hypersensitivity, executive function problems, as well as recognising, verbally defining, and conveying information about their physical sensations (Walsh et al., 2020). Numerous difficulties are also caused by healthcare workers who, almost as a rule, lack

the experience and knowledge to work with individuals with autism and do not have adequate skills to communicate with patients with autism and their parents (Morris et al., 2019). In addition to the lack of medical staff training, there is also a lack of materials that can help both doctors and parents communicate better with children with autism (Troshanska et al., 2023). Individuals with autism also face a whole range of system barriers, from an inflexible appointment system and insufficient networking of different specialists to the fact that healthcare workers are not provided with additional time for working with patients with ASD (Doherty et al., 2020; Nicolaidis et al., 2015; Shaw et al., 2023).

The aim of this systematic review is to examine the barriers and facilitators that individuals with ASD encounter during their interactions with the healthcare system by examining the experiences of individuals with autism, their parents, and healthcare providers. In light of the above, this review focuses specifically on adults with autism, with the aim of highlighting the unique challenges they face and contributing to the limited body of research on their experiences within the healthcare system.

2. METHODS

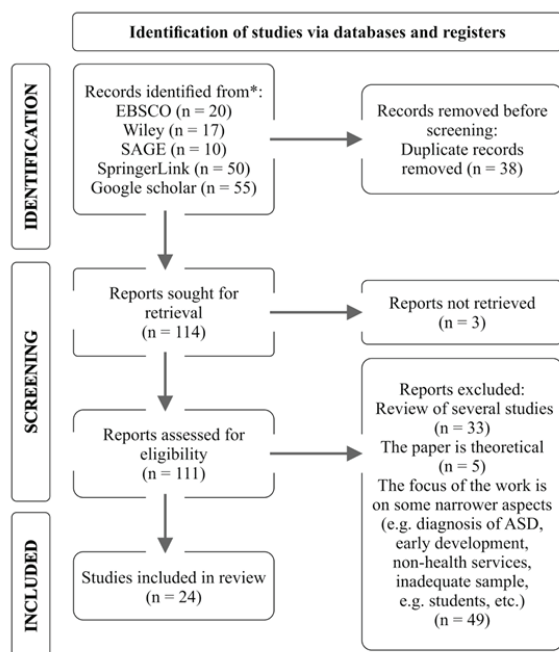
2.1. Search strategy and study selection

This systematic review followed the guidelines outlined in the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA 2020) statement (Page et al., 2021). Recognising the importance of selecting the appropriate literature search systems for research outcomes, we adhered to the recommendations of Siddaway et al. (2019) and systematically searched five databases: Elton B. Stephens Company (EBSCO), Wiley, SpringerLink, SAGE Publishing (SAGE), and Google Scholar. The search focused on stud-

ies published in English between 2018 and 2023. Although the literature largely encompasses the experiences of individuals with ASD within the healthcare system (examined through barriers and facilitators), existing systematic reviews have often been limited to studies published up to 2018 (e.g., Calleja et al., 2020; Doherty et al., 2020; Walsh et al., 2020), even though original research on this topic has continued to grow since then. Compared to previous review studies, the present study offers a novel perspective by focusing on contemporary publications issued after 2018 and providing an updated overview of the most recent findings and trends in this field. The following keywords were used in conducting this review: *healthcare providers, autistic disorders, medical professionals, knowledge, training needs, autism, healthcare access, ASD, healthcare system, health, autistic adults' experiences, general practice, clinical guidelines, care pathways, and adults*. Supplementary File 1 provides a detailed description of how the keywords were combined during the search. The following inclusion criteria were defined: 1) the paper is published in English, 2) the paper is a research study, 3) the main topic refers to the barriers or facilitators in the healthcare system, viewed through the experiences of healthcare workers in working with individuals with autism, and through the experiences of individuals with autism and their caregivers with the healthcare system, 4) the sample may include healthcare workers, individuals with autism, and their parents or caregivers, 5) the studies are based on the healthcare context, which includes different levels of healthcare organisations, e.g., primary, secondary, or tertiary healthcare.

First, one of the authors applied the inclusion criteria to the titles and abstracts of relevant papers. Of the 152 titles that were initially identified, 24 studies were included in the final analysis after rigorous screening (see Fig. 1).

Figure 1. Flowchart depicting the literature search process



We extracted data using a modified version of the form used in Calleja et al., 2020 (see Supplementary File 2). The extracted information included the number of participants in the sample and the sample category (e.g., professionals, parents, individuals with autism, and so on), where the participants came from, geographical location, type of study (qualitative studies, randomised controlled trials, non-randomised studies, mixed methods studies, quantitative, or descriptive studies), focus of the research study, applied methods, and reported outcomes.

2.2. Data synthesis

Given the heterogeneity of the studies included in this review (with regard to participants and methodological design), we used narrative synthesis to consolidate the findings and draw conclusions from them. In this study, we extracted relevant data in order to develop a preliminary synthesis, assessed the quality of the included studies, and finally, grouped the studies thematically after considering the similarities and differences in the results.

2.3. Assessment of the quality of studies

Two authors independently assessed the quality of the studies using the Mixed Methods Appraisal Tool (MMAT; Hong et al., 2018). The evaluators were expected to select the type of study (qualitative research, randomised controlled trials, non-randomised studies, quantitative descriptive studies, and mixed methods studies) and answer five questions related to the study design. For example, the following question is related to qualitative research: *'Is the qualitative approach appropriate to answer the research question?'*, and the possible answers were: *'can't tell'*, *'yes'*, and *'no'*. Studies that met all five criteria were categorised as high quality studies, those that met four criteria were medium quality studies, and those that met three or fewer criteria were rated as low quality studies (Wong et al., 2020).

3. RESULTS

3.1. Search results

The systematic literature search identified 152 relevant articles, of which, 26 studies met the inclusion criteria and were considered for further analysis. After removing duplicates ($n = 38$), we excluded papers whose full text was not available ($n = 3$), papers that were not in the form of research studies ($n = 38$), papers that did not focus on the experiences of healthcare workers and/or their training (knowledge) in order to work with individuals with autism, or the experiences of individuals with autism and their caregivers within the healthcare system, as well as papers whose samples did not include healthcare workers and/or individuals with autism, their parents, or caregivers ($n = 47$). Details regarding the 26 studies that were considered for further analysis are provided in Supplementary File 3.

Two authors of this paper independently conducted full-text reviews for all 26 studies, applying the same inclusion criteria, with an agreement rate of 92.30%. All authors discussed the disagreement related to two studies (Hayat et al., 2019; Sampson et al., 2018) and agreed to exclude them from the final review. Although the

mentioned studies examined the knowledge of autism among healthcare workers, they focused on general knowledge about clinical signs, onset of symptoms, and aetiology. Hayat et al. (2019) and Sampson et al. (2018) did not examine the experience or the level of training received by professionals for daily practice with individuals with autism.

With regard to the aforementioned inclusion criteria, our final decision was to include 24 papers in this systematic review.

3.2. Basic characteristics of the included studies

This review included a total of 24 studies (See Supplementary File 4). Most of them were conducted in the USA ($n = 9$), followed by the UK ($n = 4$), Canada ($n = 3$), Australia ($n = 2$), and Sweden ($n = 2$). Additionally, one study was conducted in each of the following countries: Ireland, Germany, Italy, and Singapore.

The samples of eight studies included only healthcare workers, while another eight studies included mixed samples (e.g., individuals with autism and professionals or parents). Five studies included only family members of individuals with autism, while the samples of three studies included only individuals with autism.

The age range of participants was reported in six of the studies that included individuals with ASD: 17-73 years (Doherty et al., 2020), 18-30 years (Saqr et al., 2018), 18-35 years (Mirsky et al., 2021), 18-77 years (Brice et al., 2021), 22-58 years (Dückert et al., 2023), and 29-65 years (Mason et al., 2021). Three studies provided data on mean age and standard deviation, without an age range (Hand et al., 2020; Maddox et al., 2020; Strömberg et al., 2022; Stein et al., 2019), with 25 years being the lowest reported mean (Hand et al., 2020).

In three studies, parents or family members of individuals with ASD reported experiences in the healthcare system involving children younger than 18 years (Garrick et al., 2022; Junnarkar et al., 2023; Taghizadeh et al., 2019). In one research study, the data referred to young people aged 18-

25 years (Ghanouni & Seaker, 2022), three studies reported experiences related to adults with ASD (Dückert et al., 2023; Hand et al., 2020; Stein Duker et al., 2019), and one study did not provide information about the age of children (family members with ASD) (Kouo et al., 2021).

The sample sizes in the included studies ranged from 10 (Saqr et al., 2018) to 1246 (Hall et al., 2020). Taken together, all 24 studies included 2190 individuals with autism, 1967 healthcare workers, 821 parents or caregivers, and 193 control group participants.

With regard to study design, the studies included were conducted based on the following methods: qualitative studies ($n = 9$), non-randomised studies ($n = 2$), mixed methods studies ($n = 10$), and quantitative descriptive studies ($n = 3$).

3.3. Quality of studies

The quality assessment of the studies showed that 18 studies were of high quality (Brice et al., 2021; Dückert et al., 2023; Garrick et al., 2022; Ghanouni & Seaker, 2022; Ghaderi & Watson, 2020; Hal et al., 2020; Jensen et al., 2020; Junnarkar et al., 2023; Maddox et al., 2020; McMillion et al., 2022; Mirsky et al., 2021; Mason et al., 2021; Pettersson et al., 2023; Riosa et al., 2022; Saqr et al., 2018; Strömberg et al., 2022; Stein Duker et al., 2019; Taghizadeh et al., 2019), three studies were of medium quality (Eades et al., 2019; Hesse et al., 2023, Kouo et al., 2021), and three studies were of low quality (Corsano et al., 2020; Doherty et al., 2020; Hand et al., 2020) (See Supplementary file 5).

3.4. Synthesis of barriers and facilitators

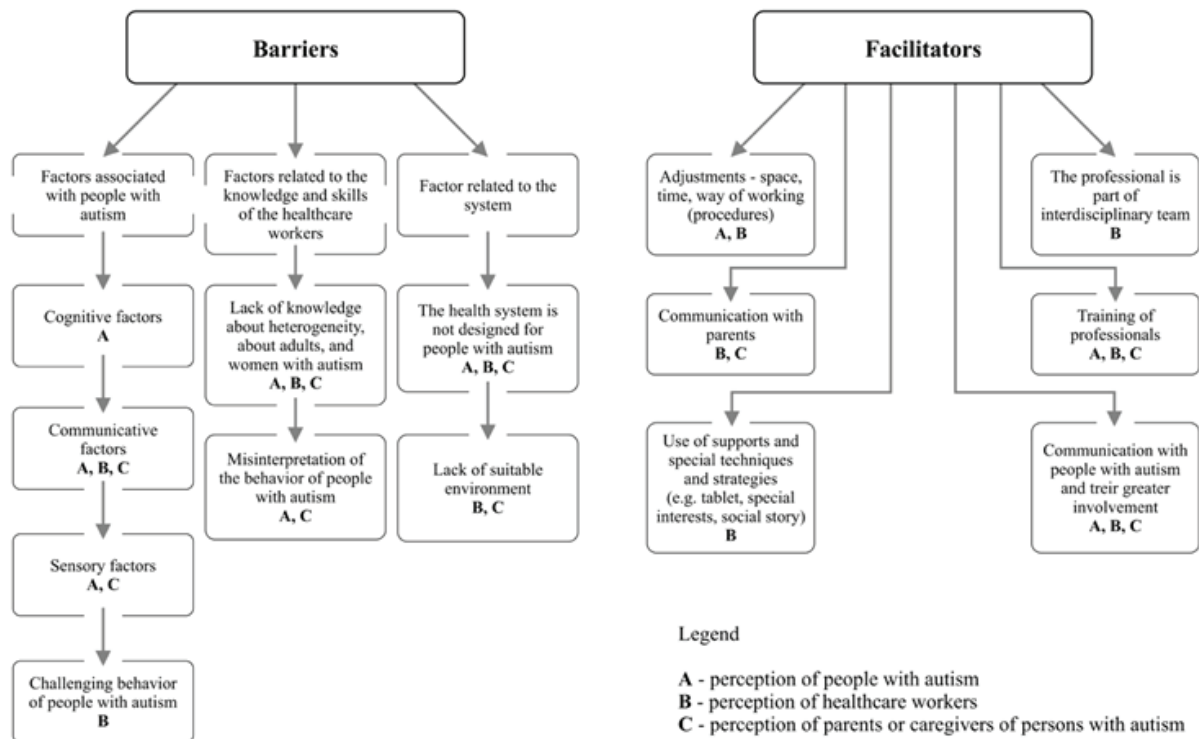
The studies were first grouped into three categories based on who the participants were - individuals with ASD, parents or caregivers, and professionals. Next, two categories were established within each examined group - barriers and facilitators. Finally, subcategories were formed within each of these categories by grouping topics (Fig. 2). From the data presented in Figure 2, we can identify three groups of barriers - those related to individuals with autism (Doherty et al., 2020;

Maddox et al., 2020; McMillion et al., 2022; Mason et al., 2021; Mirsky et al., 2021; Saqr et al., 2018; Strömberg et al., 2022; Stein Duker et al., 2019), those related to healthcare workers (Corsano et al., 2020; Dücker et al., 2023; Eades et al., 2019; Garrick et al., 2022; Ghaderi & Watson, 2020; Hall et al., 2020; Kouo et al., 2021; Jensen et al., 2020; Maddox et al., 2020; McMillion et al., 2022; Strömberg et al., 2022; Stein Duker et al., 2019; Taghizadeh et al., 2019), and those related to the healthcare system (Dücker et al., 2023; Eades et al., 2019; Garrick et al., 2022; Ghanouni & Seaker, 2022; Junnarkar et al., 2023; Mason et al., 2021; Maddox et al., 2020; Mirsky et al., 2021; Saqr et al., 2018; Strömberg et al., 2022; Stein Duker et al., 2019; Taghizadeh et al., 2019).

On the other hand, the extracted data shows that access to healthcare system can be improved by adjusting spatial organisation (e.g., sensory environment, clinical and service context; Brice et al., 2021; Junnarkar et al., 2023; Mason et al., 2021; Mirsky et al., 2021; Pettersson et al., 2023;

Stein Duker et al., 2019; Taghizadeh et al., 2019), temporal and procedural organisation (Junnarkar et al., 2023; Mason et al., 2021; Pettersson et al., 2023; Stein Duker et al., 2019; Taghizadeh et al., 2019), communicating with individuals with autism (Brice et al., 2021; Ghaderi & Watson, 2020; Hand et al., 2020; Kouo et al., 2021; Jensen et al., 2020; Mason et al., 2021; Mirsky et al., 2021; Pettersson et al., 2023; Taghizadeh et al., 2019), and their parents (Ghaderi & Watson, 2020; Jensen et al., 2020; Junnarkar et al., 2023; McMillion et al., 2022; Pettersson et al., 2023; Riosa et al., 2022), as well as applying appropriate techniques and strategies when working with individuals with autism (Brice et al., 2021; Kouo et al., 2021; McMillion et al., 2022; Stein Duker et al., 2019; Taghizadeh et al., 2019), educating professionals (Brice et al., 2021; Hesse et al., 2023; Jensen et al., 2020; Kouo et al., 2021; McMillion et al., 2022), and forming interdisciplinary teams (Ghaderi & Watson, 2020; Jensen et al., 2020).

Figure 2. Synthesis of barriers and facilitators



4. DISCUSSION

The results of our systematic review indicate that most studies report barriers that are related to healthcare workers. Data from the included studies show that healthcare workers generally do not understand autism and the needs and behaviours of individuals with autism (Garrick et al., 2022; Maddox et al., 2020; Strömberg et al., 2022). In addition, their knowledge about comorbid conditions that accompany autism or how to interact with individuals with ASD is insufficient (Corsano et al., 2020; Eades et al., 2019; Stein Duker et al., 2019). They also lack information about the clinical signs of ASD in women (Dückert et al., 2023, Eades et al., 2019), individuals with higher support needs (Jensen et al., 2020), and those who belong to the high-functioning category (Dückert et al., 2023). The healthcare workers who participated in the studies included in our review largely believe that the training they received and the courses about autism that they attended were not helpful and did not provide them with necessary information required for their work (Dückert et al., 2023; Ghaderi & Watson, 2020; Jensen et al., 2020; Taghizadeh et al., 2019). Corden et al. (2020) reported similar findings in their review, which included 35 studies on the knowledge and self-efficacy of healthcare professionals who work with individuals with ASD and the factors that affect these aspects. According to their results, healthcare workers have low to moderate levels of both knowledge and self-efficacy (Corden et al., 2020). Corden et al. (2020) further indicated that the healthcare worker's knowledge positively correlates with their experience and self-efficacy and that cultural factors are largely associated with their knowledge and attitudes. Additionally, the level of a physician's knowledge is often related to the type of specialisation that they undergo, and thus, paediatric and psychiatric specialties have more knowledge about autism than general practitioners or other specialists working with adults (Corden et al., 2020). It is not surprising that the barriers related to the competencies of healthcare workers are frequently reported since it is believed that insufficient awareness and knowledge of professionals within the healthcare system contribute

to inadequate diagnosis and untimely treatment of comorbid conditions in individuals with ASD (Hirvikoski et al., 2016).

System-related barriers are the second most frequently reported type of barrier in the present study. The results show that the healthcare system lacks adequate access to specialised services for individuals with ASD, that the waiting time for these services is very long, and that they are often physically inaccessible: however, when specialised services are available, there is insufficient knowledge about them, or the means of sharing information about them is inadequate (Dückert et al., 2023; Ghanouni & Seaker, 2022; Mason et al., 2021; Maddox et al., 2020). Additionally, these services are usually expensive and poorly planned in terms of duration (Eades et al., 2019; Ghanouni & Seaker, 2022; Junnarkar et al., 2023; Mirsky et al., 2021). In addition, there is a noticeable lack of coordination and communication between different healthcare services used by individuals with autism (Maddox et al., 2020; Mason et al., 2021). Even when these individuals have access to a particular service, prolonged waiting times can be a problem (Garrick et al., 2022; Mason et al., 2021; Mirsky et al., 2021; Saqr et al., 2018; Strömberg et al., 2022; Stein Duker et al., 2019; Taghizadeh et al., 2019), since waiting rooms are typically noisy and crowded, leading to sensory overstimulation. Walsh et al. (2023) reported similar system-related issues in their systematic review, which included 31 studies from 2003 to 2018, and pointed out that these barriers can be explained by resource shortages, rigidity in the healthcare system, and a lack of continuity in healthcare for individuals with ASD (e.g., transition from paediatric to adult healthcare services). With regard to all these system-related problems, it is not surprising that individuals with ASD are often dissatisfied with the healthcare system's efficiency, prompting them to report that their health needs are often left unmet (Crane et al., 2023; Nicolaidis et al., 2013).

Another factor that is consistently reported when discussing the barriers related to individuals with autism are communication difficulties. Individuals with ASD report feeling uncomfortable when communicating with healthcare workers

over the phone, via voicemail, or verbally face-to-face (Doherty et al., 2020). Their communication is often negatively affected by sensory difficulties, as well as by the anxiety associated with visiting a doctor (Mirsky et al., 2021; Saqr et al., 2018; Strömberg et al., 2022; Stein Duker et al., 2019). Furthermore, planning and scheduling appointments and remembering dates can also be challenging for individuals with ASD (Doherty et al., 2020; Mason et al., 2021). When healthcare workers report on this type of barrier, apart from acknowledging communication difficulties (McMillion et al., 2022; Stein Duker et al., 2019), some of them express concerns about aggressive outbursts and the cognitive potential of individuals with ASD (Maddox et al., 2020; McMillion et al., 2022; Stein Duker et al., 2019). Maddox et al. (2020) attribute this perception among healthcare workers to the fact that these professionals are insufficiently informed, thus, pointing to the need for organising programmes for professionals aimed at dispelling misconceptions about ASD. Other systematic reviews (Hamdan & Bennett, 2024; Mason et al., 2019; Shady, Phillips, & Newman, 2024; Walsh et al., 2020), as well as original research studies (Doherty et al., 2023; Shaw et al., 2023) have identified communication and sensory difficulties as being the most common barriers associated with autism-related characteristics. Communication problems in individuals with autism are not limited to speech production, but also include the comprehension of abstract language and professional jargon, which can hinder their understanding of messages received from healthcare workers. These individuals tend to communicate in a different way, which can be challenging for healthcare workers if they lack relevant information about alternative communication methods (Shady et al., 2024). It should be pointed out that successful and effective communication is not the sole responsibility of individuals with ASD. Healthcare workers must share this responsibility and consider how to adapt the way in which they address individuals who may have an entirely different experience when it comes to listening, understanding, conveying messages, and thinking (Godfree et al., 2022). On the other hand, sensory

issues that some individuals with ASD have can make healthcare institutions entirely inaccessible. For example, these individuals may be bothered by fluorescent lighting, the sound of fans, hospital smells, physical contact in waiting rooms or during examinations, and so on. (Doherty et al., 2023). Thus, it is essential to carefully prepare individuals with autism for medical interventions through systematic desensitisation, social stories, and various behavioural techniques (Glumbić et al., 2022).

Facilitators often refer to various adjustments in healthcare practice. With regard to sensory adjustments, studies have discussed modifications in the levels of spatial lighting, noise, and crowding in waiting rooms (Brice et al., 2021; Stein Duker et al., 2019), as well as finding alternative waiting locations (Mason et al., 2021), minimising waiting times (Stein Duker et al., 2019), attempting to alter the smells in waiting areas (e.g., using lavender scents, and so on; Mirsky et al., 2021), and modifying the appearance of walls and the content displayed on them (Junnarkar et al., 2023). During direct contact with individuals with ASD, healthcare workers can share information about examination outcomes in different ways (e.g., a written summary of the appointment; Mason et al., 2021). In order to improve communication, healthcare workers can ensure predictability (Mirsky et al., 2021; Taghizadeh et al., 2019), use a positive, compassionate, and respectful approach (Eades et al., 2019; Hand et al., 2020; Jensen et al., 2020; Kouo et al., 2021; Taghizadeh et al., 2019), allow the patient to communicate in alternative ways (e.g., using pictures; McMillion et al., 2022), and dedicate as much time as necessary to the patient (Kouo et al., 2021; McMillion et al., 2022; Pettersson et al., 2023). Through adequate cooperation between family members and healthcare workers, individuals with autism can be better prepared for visiting doctors. For example, this may involve using video presentations, visual timetables, toys, books, and social stories (Junnarkar et al., 2023; Riosa et al., 2022; Stein Duker et al., 2019; Taghizadeh et al., 2019), as well as tablets and objects that are of particular interest to individuals with ASD (Taghizadeh et

al., 2019), modelling (Kouo et al., 2021), or using ‘take-home-packs’ for practicing at home (Eades et al., 2019). At the same time, doctors can also be prepared by, for example, keeping track of a list of requested needs and strategies, as well as a list containing additional information about the patient before the visit (Riosa et al., 2022; Stein Duker et al., 2019). Some of the facilitators identified focus on improving the knowledge and skills of healthcare professionals in order for them to better understand autism (Brice et al., 2021; Kouo et al., 2021; Riosa et al., 2022), creating more opportunities for gaining practical experience during professional education (Ghaderi & Watson, 2020), as well as communicating with other colleagues and networking within professional teams (Ghaderi & Watson, 2020). In their systematic review of 30 publications, Walsh et al. (2023) provides a synthesis of research on interventions that can be used to improve the healthcare experiences of individuals with ASD and enhance their access to the healthcare system. Unfortunately, most interventions in their review focused solely on individuals with ASD. On the other hand, few interventions focused on service providers, i.e., changing their attitudes and improving their knowledge about autism. These interventions were primarily educational (e.g., online training module) and their success rate was around 60%. Finally, only two studies used interventions that focused on systematic changes. Walsh et al. (2023) stated that the need for adjustment within the healthcare system is a priority, and that future research should focus on changes related to healthcare workers and the system, after considering the opinions of individuals with ASD regarding necessary modifications.

5. LIMITATIONS

It is possible that the search strategy used in this review did not identify all relevant studies. The studies included varied in their study design and the qualitative research approach prevented additional analyses (e.g., meta-analysis). Excluding papers that were written in languages other than English may have limited the possibility to generalise the results, thus highlighting the poten-

tial limitation of conducting a comparative analysis from a cultural perspective. Although some authors recommend including grey literature in reviews (Hopewell et al., 2007), other authors (Mahood et al., 2014) have suggested that this strategy can have drawbacks and pose a threat to the internal validity of a systematic review. Therefore, it is important to be aware of this potential limitation.

6. CONCLUSION

Due to the high prevalence of ASD, the increased risk of comorbid conditions associated with autism, as well as the risk of poor health, the topic related to accessibility of healthcare services (i.e., the barriers that hinder access and facilitators that improve access) is becoming increasingly important both for individuals with ASD and healthcare workers. The aim of this systematic review was to examine the barriers and facilitators encountered by individuals with ASD during their interactions with the healthcare system based on the experiences of individuals with autism, their parents, and healthcare providers. This review identified barriers related to the knowledge and attitudes of healthcare workers, the ways in which the healthcare system functions, and the characteristics of autism. The facilitators identified in this review include improving healthcare workers’ competencies regarding autism, their communication with individuals with ASD and their families, and their ability to adapt their approach.

The findings of this review represent an initial body of evidence on the existing barriers and facilitators encountered by individuals with ASD face during their interactions with the healthcare system. Since knowledge among professionals has been recognised as the most commonly reported barrier, one of the practical implications of this review would involve thorough planning of relevant formal and informal training for healthcare workers on autism. Among other things, this involves reviewing autism-related content acquired during formal education and subsequent training, and providing necessary modifications so that healthcare workers across all disciplines gain the required knowledge and skills. When de-

veloping such programmes, it would be advisable to ensure that they are broadly applicable and easy to implement within the daily (or weekly) working schedules of healthcare workers. Thus, programmes available on online platforms could also be considered.

In addition, since it is difficult for individuals with ASD to gain access specialists who are familiar with autism (i.e., since there is scarcity of qualified doctors), one of the implications of this review, which is also related to professional training, would involve developing ASD-related specialisation programmes for healthcare workers.

Improving the knowledge levels of healthcare workers would enable them to better understand and accept autism, which would, in turn, lead to reasonable adjustments in working with such

patients. It is therefore believed that healthcare workers should familiarise themselves with the way individuals with ASD communicate, allow them enough time to respond, reduce their rate of speech and the amount of information conveyed, as well as respect the autonomy of individuals with ASD. Removing the barriers could create conditions for improved healthcare outcomes and experiences for individuals with ASD.

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