

Global autism guidelines for care and workforce education: progress, gaps, and the way forward

Sailaja Musunuri¹, Tine Hansen-Turton², Lisa Graves³, Pankaj B. Shah⁴, Andrew Kind-Rubin⁵, Teresa Naseba Marsh⁶, Susan Waller⁷, Janet Somlyay⁸, Mary Consolata Ishepe Nandili⁹, Minn N. Yoon¹⁰, Nicholas Torres¹¹, Elizabeth Hayden¹², Scott Spreat¹³, and Anupriya Mishra¹⁴

¹MD, Chief Medical and Clinical Officer, Executive Vice President of Integrative Medicine, at Woods System of Care, Langhorne, United States

²MGA, JD, President and CEO of Woods System of Care, Langhorne, United States

³MD, MClSc, family physician and Professor Family and Community Medicine at Western Michigan University Homer Stryker M.D. School of Medicine, Kalamazoo, United States

⁴MD, PhD in Community Medicine, Associate Dean Research, Professor Community Medicine, SRMC & RI, SRIHER, Chennai, India

⁵PhD, Licensed clinical psychologist and certified school psychologist, Langhorne, United States

⁶PhD, MA, RN, RP, SEP, Assistant Professor, Clinical Sciences, Northern Ontario School of Medicine, Laurentian and Lakehead Universities, Thunder Bay, Canada

⁷PhD, Assistant Professor, United Arab Emirates University, Abu Dhabi, United Arab Emirates

⁸DNP, Nursing Lecturer, Department of Health Sciences and Nursing, Rider University, Lawrenceville, United States

⁹PhD, MPH, RN, Consultant, Ready Care Staffing Africa, Schools of Nursing in African Countries, Nairobi, Kenya

¹⁰PhD, Associate Professor, Mike Petryk School of Dentistry, University of Alberta, Edmonton, Canada

¹¹MEd, President, The Network: Towards Unity for Health, Bryn Mawr, United States

¹²MPH, MEd, Vice President of Strategy Development, Woods System of Care, Langhorne, United States

¹³EdD, Vice President of Evaluation and Research, Woods System of Care, Langhorne, United States

¹⁴MBA, MS, Fellow and Manager at the Mollie Woods Hare Center for Excellence in Neurodivergence at Woods System of Care, Langhorne, United States

Abstract

Addressing the complex and evolving needs of individuals with autism requires more than incremental improvement; it demands a rethinking of how care systems are designed, delivered, and evaluated, and how we educate the health workforce. While existing clinical guidelines and resources provide valuable foundations, they often remain fragmented and may not fully reflect the diversity of the populations they serve. This paper presents a critical analysis of existing global autism care frameworks, highlighting gaps that particularly impact underserved populations, especially in low- and middle-income settings. While many guidelines emphasize early diagnosis and evidence-based therapies, they frequently overlook essential areas

such as trauma-informed care, sexual health, caregiver support, transitions across the lifespan, and more. This paper offers a fresh, equity-driven perspective and proposes actionable, context-sensitive strategies to reimagine autism care. For mental health and social care professionals and trainees, including primary care providers and other healthcare practitioners, as well as those supporting individuals with autism in public health and social care settings, this paper highlights key challenges and outlines practical solutions. A full set of detailed recommendations is presented in [our comprehensive report](#).

Keywords: autism, global care gaps, autism guidelines

Date submitted: 19-October-2025

Email: Anupriya Mishra (anupriya.mishra@woods.org)

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-Non Commercial-Share Alike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

Citation: Musunuri S, Hansen-Turton T, Graves L, Shah P, Kind-Rubin A, Marsh T, Waller S, Somlyay J, Nandili M, Yoon M, Torres N, Hayden E, Spreat S, and Mishra A. Global autism guidelines for care and workforce education: progress, gaps, and the way forward. *Educ Health* 2025;38:439-445

Online access: www.educationforhealthjournal.org

DOI: 10.62694/efh.2025.508

Published by The Network: Towards Unity for Health

Introduction:

Autism, a complex neurodevelopmental condition that exists on a spectrum, is characterized by persistent challenges in social communication alongside restricted interests and repetitive behaviors. Although autism is lifelong, the intensity and nature of support vary significantly across individuals.¹ For this paper, the term “autism” is used to encompass the entire spectrum.

In the United States alone, approximately 1 in 31 children in the U.S. has autism, up from the previous rate of 1 in 36, according to the Centers for Disease Control and Prevention (CDC).² On a global scale, the World Health Organization (WHO) estimates that 1 in 127 people has autism,³ though emerging studies suggest that the true prevalence may be even higher. Despite the alarming number of individuals with autism, access to appropriate healthcare services remains severely limited, especially in lower-resource countries (LRCs). Many face substantial barriers, including a lack of available services and integrated care, high costs, limited physician knowledge, and insufficiently trained professionals. These challenges contribute to poorer health outcomes, as many individuals with autism experience increased morbidity and mortality due to unmet healthcare needs.⁴ While these challenges are well recognized, most research on healthcare barriers for individuals with autism has been conducted in high-resource countries (HRCs).⁵

The lack of research from lower-resource countries (LRCs), combined with inconsistent tracking and reporting of autism data globally,⁶ makes it difficult to design regionally appropriate strategies, particularly for adults with autism who are often overlooked in existing studies. Cultural beliefs that associate autism with supernatural or spiritual forces further cause delayed medical intervention and contribute to stigma.⁷ A study reveals that individuals with autism are acutely aware of being stereotyped, judged, and discriminated against, which can negatively impact their self-worth and mental health.⁸ Moreover, co-occurring conditions⁹ like epilepsy, anxiety, depression, attention-deficit/hyperactivity disorder (ADHD), sleep disorders, and self-injurious behaviors are frequently underdiagnosed or poorly managed due to fragmented services. Addressing these multifaceted challenges requires a more inclusive, culturally sensitive, and holistic approach to autism care.

While guidelines from organizations such as the Centers for Disease Control and Prevention (CDC),^{10,11} Autism Europe,¹² The Public Health Agency of Canada,¹³ Autism Speaks,¹⁴ Harvard Medical School,^{10,11,15} and from Africa,¹⁶ India,¹⁷ Latin America,¹⁸ Arab¹⁹ countries and more, have laid important groundwork for autism care, notable gaps remain in areas such as trauma-informed care, reproductive health, sexual health for children and adults with autism, and transitional support for independent living. Health workforce education in all of these areas is also deficient. Cultural contexts and environmental challenges are similarly under-addressed, leading to care models that may not translate across diverse communities. The absence of a centralized resource platform, limited affordability, and poor connection to community-based services only deepen these barriers. Caregivers, too, remain unsupported, facing burnout, a lack of respite care, and significant obstacles when navigating healthcare or funding systems.

This paper and its accompanying comprehensive report bring together insights from leading international health organizations, autism-specific resources, and collaborative discussions with a team of global experts to examine how these gaps can be bridged. It draws attention to key areas for intervention and outlines actionable strategies for more holistic, person- and family-centered care. Grounded in the World Health Organization’s Primary Health Care (PHC) framework,²⁰ the paper calls for systems that address emotional, physical, social, and developmental needs while promoting dignity, equity, and lifelong support for individuals with autism.

Methodology

This paper undertakes a comprehensive review of existing global clinical guidelines and workforce competencies related to autism care. Key sources included publications from the World Health Organization (WHO), peer-reviewed journals, government health agencies, and autism-focused organizations. A search of the English-language literature was conducted using keywords such as “autism,” “global clinical guidelines,” “autism diagnosis and treatment,” “culturally sensitive care,” “workforce competencies,” “lifespan support,” “trauma-informed autism care,” and related terms. This search spanned multiple databases, including PubMed, Google Scholar, JSTOR, PsycINFO, PROSPERO, as well as the

official websites of international health organizations.

To enrich the review, monthly global consultative meetings were held with a group of healthcare professionals, autism specialists, social care providers, policy experts, and people with lived experience. These sessions facilitated the synthesis of recent research, expert opinions, and practical experiences across diverse regions. Using thematic analysis, the team identified key patterns, regional differences, and care gaps. This led to a WHO-aligned gap analysis highlighting actionable improvements and practical strategies for integrating recommendations into healthcare systems.

Findings

A review that initially identified approximately 1,200 autism-related global clinical guidelines and resources, from which 80 key references were selected, highlights substantial progress in improving care, support, and quality of life for individuals with autism, while also revealing significant gaps.

A) Core Areas Covered by Existing Guidelines and Resources for Autism

Global clinical guidelines and resources emphasize a collaborative, multidisciplinary approach to autism diagnosis and assessment, involving psychologists, therapists, educators, and medical professionals. They promote the use of standardized tools to evaluate autism-specific symptoms alongside communication, adaptive behavior, and overall physical and mental health. Early identification through routine developmental screenings and anticipatory guidance for common challenges such as sleep and feeding difficulties is highlighted as essential. For treatment, evidence-based therapies like Applied Behavior Analysis are widely recommended, with intervention plans customized to the individual's age, cultural background, and family context. Social-relational methods are also promoted to support social skills development. Guidelines integrate the management of co-occurring conditions, such as anxiety, depression, gastrointestinal issues, and ADHD, within comprehensive care models that include preventive health screenings and vaccinations.

Family and caregiver support is a key component in existing guidelines, with resources to help navigate legal, educational, and healthcare systems, emphasizing cultural sensitivity and respectful

engagement with family norms. Transition planning from childhood to adulthood addresses evolving healthcare needs, insurance navigation, and the development of self-management skills. Legal and ethical considerations, including guardianship and healthcare protections are covered, alongside the growing role of telehealth in expanding access and crisis management. Additionally, the guidelines promote holistic care by focusing on mental and physical health, community integration, sexual health education, advocacy, and educational support, encouraging the creation of autism-friendly environments to foster inclusion and a sense of belonging.

B) Identified Gaps in Autism Care Guidelines and Resources

While existing frameworks on autism offer a strong foundation for diagnosis, intervention, and support, our team of experts identified significant gaps across several key areas, including but not limited to cultural relevance, accessibility, communication, trauma-informed care, and lifelong support. These shortcomings underscore the need for more comprehensive, equitable, and context-sensitive approaches that can better meet the diverse needs of individuals with autism, their families, and the professionals who support them around the world.

To bring clarity to these findings, the gaps were organized into distinct categories, which are discussed below:

1. Cultural and Environmental Considerations Gaps:

Current autism care guidelines and resources often lack attention to the intersectionality of race/ethnicity, socioeconomic status, gender identity, and regional cultural differences. Most guidelines are based on research from high-income Western countries, making them less applicable to low- and middle-income regions with diverse cultural and infrastructural contexts. This may result in care strategies that are not fully inclusive or equitable. Additionally, guidelines tend to overlook the challenges faced by healthcare providers in rural, remote, and indigenous communities, where local traditions and/or limited resources require tailored approaches. The failure to incorporate existing community resources for early detection and care in under-resourced areas further limits their effectiveness. Lastly, the use of complex medical terminology makes guidelines difficult for caregivers without professional backgrounds to understand and apply.

2. Accessibility and Affordability Gaps: There is no centralized platform providing easy access to updated autism care guidelines, leading to confusion and inconsistent use among caregivers and practitioners. Guidelines are often updated irregularly, preventing the integration of the latest evidence-based practices. Moreover, many resources are behind paywalls or require expensive memberships, particularly limiting access in low- and middle-income countries. This creates significant barriers for families and professionals who most need these materials.

3. Communication and Support Gaps: Communication strategies remain under-prioritized in many guidelines and resources despite being fundamental to supporting individuals with autism. Many individuals struggle with non-verbal cues, yet guidelines focus more on clinical interventions than communication needs. There is also an overreliance on caregiver perspectives, which can overshadow the direct input and lived experiences of individuals with autism themselves.

4. Trauma and Crisis Management Gaps: Guidelines and resources frequently do not include sufficient emphasis on trauma-informed care, which is essential for protecting individuals from emotional distress during healthcare interactions. Without this focus, individuals with autism may face communication challenges that can unintentionally cause re-traumatization and increase their stress and anxiety during medical visits and encounters with other professionals.

5. Sexuality and Psychological Well-being Gaps: Sexual health guidance for children and adults with autism is notably insufficient in existing guidelines and resources. Topics such as sexual rights, consent, intimacy, and menstrual health, especially for women with autism, are often neglected, which restricts their access to essential information and support needed to promote their well-being and independence.

6. Holistic Autism Care Across Life Stages Gaps: There is a significant lack of comprehensive support for adults with autism, particularly in transitioning from childhood to adulthood systems of care. Guidelines inadequately address employment, independent living, social integration, and aging. Caregiver support during life transitions is also underdeveloped, with little focus on managing stress and burnout. Furthermore, other therapies like

art, music, and dietary interventions receive minimal attention, despite their potential benefits.

7. Gaps in Autism Care That Call for Inclusive Policy Action: There is a significant lack of targeted policy support to close critical gaps in autism care, especially in low- and middle-income countries. Limited awareness often leads to delayed diagnoses and inadequate services, while stigma reinforces exclusion and discrimination. Many regions lack reliable public health data on autism, making it difficult to design effective, evidence-based interventions. A global shortage of trained autism professionals further restricts access to quality care. Funding gaps prevent the development and sustainability of vital programs, particularly for adults with autism. These adults often face barriers to employment, independent living, and community participation. Additionally, autism policies are frequently developed without input from individuals with autism, their families, or community organizations, leading to solutions that miss real-world needs.

8. Additional Practical Barriers: The absence of a centralized resource platform, challenges in navigating funding and insurance systems, limited use of technology to reach underserved populations, and insufficient peer support and respite care for caregivers further complicate effective autism care delivery.

Key Recommendations

The gaps identified in global clinical guidelines and related resources for autism highlight important opportunities to enhance support for individuals across diverse contexts. To address this, the global expert group developed actionable recommendations and practical strategies to strengthen autism support.

1. Strengthening Public Awareness: To address the persistent lack of awareness and stigma surrounding autism, it is recommended that governments lead national public education efforts. These campaigns delivered through media, schools, and community organizations are suggested to focus on increasing recognition of early signs of autism, highlighting the importance of early diagnosis, and promoting the benefits of timely intervention. In addition, it is recommended that policies be introduced to ensure healthcare professionals, educators, and social workers are

trained to effectively identify and support individuals with autism.

2. Expanding Workforce Capacity and Incentives: To address shortages in the autism care workforce, especially in low-resource settings, the development of targeted scholarships and career incentives is recommended. These initiatives aim to attract early care professionals into direct care, education, and healthcare fields related to autism support.

3. Building Culturally Responsive Training and Education: The development of a global, accessible online training module focused on trauma-informed autism care is proposed to enhance caregiver and provider capacity. This training would address how trauma may present differently in individuals with autism and integrate cultural sensitivity and humility to ensure relevance across diverse communities. Additionally, the creation of tailored sexual health education programs for children and adults with autism, covering topics such as consent, boundaries, and relationships, could respond to a critical and often overlooked area of need.

4. Enhancing Communication and Resource Accessibility: To better support caregivers and families globally, a centralized platform offering autism care guidelines in multiple languages is recommended. Additionally, customizable communication toolkits featuring visual supports, assistive technology, and non-verbal communication strategies can help caregivers respond more effectively to individual needs.

5. Supporting Transition to Adulthood: Recognizing the gap in support during the transition to adulthood, comprehensive and individualized programs are recommended. These programs would focus on building life skills such as job readiness, financial literacy, and daily living, tailored to each individual's goals and abilities. The aim is to foster autonomy and enhance long-term well-being, while

honoring diverse definitions of independence and adult life across cultural and personal contexts.

6. Localizing Care Approaches: Developing region-specific, culturally informed autism care guidelines in collaboration with local communities and practitioners can enhance the relevance and effectiveness of interventions. The formation of Global Communities of Practice (CoPs) is also proposed as a platform for exchanging local knowledge and experiences, helping to bridge the divide between global research and local realities.

7. Integrating Autism into Public Health Infrastructure: Integrating autism screening into existing public health programs, such as maternal and child health services or vaccination visits, could offer a cost-effective approach to early identification, particularly in under-resourced settings.

These recommendations represent a selection of the broader strategies detailed in the full report and collectively provide a comprehensive framework for advancing autism support across diverse global contexts.

Conclusion

Our review of global clinical guidelines and autism resources highlights important strengths as well as significant gaps that limit their effectiveness in diverse cultural and socioeconomic contexts. While current frameworks provide essential guidance on early diagnosis, evidence-based interventions, and multidisciplinary collaboration, there are clear opportunities to better address the complex and varied needs of individuals with autism, especially those in under-resourced and culturally diverse settings.

This analysis points to the need for more inclusive, adaptable, and person-centered approaches that focus on long-term support, equitable access to services, and active involvement of individuals with autism in care decisions.

References

1. American Psychiatric Association. (2024). What is autism spectrum disorder? American Psychiatric Association. Retrieved October 6, 2025. <https://www.psychiatry.org/patients-families/autism/what-is-autism-spectrum-disorder>
2. Centers for Disease Control and Prevention. (2025, May 21). Autism prevalence varies across US communities. Centers for Disease Control and Prevention. Retrieved October 2, 2025. <https://www.cdc.gov/autism/articles/prevalence-varies-across-us-communities.html>

3. World Health Organization. (2025, September 17). Autism spectrum disorders. World Health Organization. Retrieved September 25, 2025. <https://www.who.int/news-room/fact-sheets/detail/autism-spectrum-disorders>
4. Walsh, C., O'Connor, P., Walsh, E., & Lydon, S. (2021). A systematic review of interventions to improve healthcare experiences and access in autism. *Review Journal of Autism and Developmental Disorders*, 9(4), 452–471. <https://doi.org/10.1007/s40489-021-00279-2>
5. Malik-Soni, N., Shaker, A., Luck, H. et al. Tackling healthcare access barriers for individuals with autism from diagnosis to adulthood. *Pediatric Research*, 91, 1028–1035 (2022). <https://doi.org/10.1038/s41390-021-01465-y>
6. World Population Review. (2025). Autism rates by country 2025. World Population Review. Retrieved September 1, 2025. <https://worldpopulationreview.com/country-rankings/autism-rates-by-country>
7. Kassous, I. Z. (2023). Researching autism in the Global South (MENA region): To what extent is Western autism research inclusive towards the Global South? *Women's Health*, 19, 17455057231156315. <https://doi.org/10.1177/17455057231156315>
8. Han, E., Scior, K., Avramides, K., & Crane, L. (2022). A systematic review on autistic people's experiences of stigma and coping strategies. *Autism Research*, 15(1), 12–26. <https://doi.org/10.1002/aur.2652>
9. World Health Organization. (2025, April 4). From awareness to action: How global health is embracing the growing challenge of autism. WHO Regional Office for Southeast Asia. Retrieved July 3, 2025. <https://www.who.int/southeastasia/news/feature-stories/detail/from-awareness-to-action--how-global-health-is-embracing-the-growing-challenge-of-autism>
10. Centers for Disease Control and Prevention. (2024). *Clinical screening for autism spectrum disorder*. <https://www.cdc.gov/autism/hcp/diagnosis/screening.html>
11. Centers for Disease Control and Prevention. (n.d.). Learn the signs. Act early: Resources to support child development. Retrieved August 2, 2025. <https://www.cdc.gov/ncbddd/actearly/index.html>
12. Barthélémy, C., Fuentes, J., Howlin, P., & van der Gaag, R. (2019). *People with autism spectrum disorder: Identification, understanding, intervention* (3rd ed.). Autism-Europe. <https://www.autismeurope.org/blog/2019/09/16/people-with-autism-spectrum-disorder-identification-understanding-intervention-third-edition/>
13. Public Health Agency of Canada. (2024). *Framework for autism in Canada* (Cat. No. HP15-69/1-2024E-PDF; ISBN 978-0-660-73561-0). Government of Canada. <https://www.canada.ca/en/public-health/services/publications/diseases-conditions/framework-autism-canada.html#a5.1>
14. Autism Speaks. (2025) *Autism Speaks tool kits*. <https://www.autismspeaks.org/autism-speaks-tool-kits>
15. Harvard Medical School. (n.d.). Adult Autism Health Resources (AAHR) health care toolkit: *Navigating the health care system with autism*. <https://adult-autism.health.harvard.edu/aahr-healthcare-toolkit/>
16. Aderinto, N., Olatunji, D., & Idowu, O. (2023). Autism in Africa: Prevalence, diagnosis, treatment, and the impact of social and cultural factors on families and caregivers: A review. *Annals of Medicine and Surgery*, 85(9), 4410–4416. <https://doi.org/10.1097/MS9.0000000000001107>

17. Subramanyam, A. A., Mukherjee, A., Dave, M., & Chavda, K. (2019). Clinical practice guidelines for autism spectrum disorders. *Indian Journal of Psychiatry*, *61*(Suppl 2), 254–269. https://doi.org/10.4103/psychiatry.IndianJPsychiatry_542_18
18. Montiel-Nava, C., Montenegro, M. C., & Silvestre Paula, C. (2023). Age of autism diagnosis in Latin American and Caribbean countries. *Autism*, *28*(1). <https://doi.org/10.1177/13623613221147345>
19. Alkhateeb, J. M., Hadidi, M. S., & Mounzer, W. (2022). The impact of autism spectrum disorder on parents in Arab countries: A systematic literature review. *Frontiers in Psychology*, *13*. <https://doi.org/10.3389/fpsyg.2022.955442>
20. World Health Organization. (n.d.) *Primary health care*. https://www.who.int/health-topics/primary-health-care#tab=tab_1