International Perspectives in Coordinated Care for Individuals with ASD



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Abstract In spite of recent attention and initiatives, international dissemination of ASD services still requires substantial effort to meet the needs of families. Although the importance of interdisciplinary care coordination remains important in moving progress forward, in the global context this may manifest in different ways. Parents currently play more prominent roles to promote improvements in international ASD service provision but coordination with a range of stakeholders at all levels is required for meaningful progress. Currently, providers must engage in creative approaches to ensure that best practices reach families. This occurs through thoughtful adaptation and translation, careful consideration of cross-cultural differences in social behaviors, and attention to the role of culture in the assessment and therapeutic context. To make more impactful strides research is needed in a wide range of areas such as incorporating cross-cultural variability into the assessment process and in the domain of implementation science.

Service provision for individuals with autism spectrum disorder (ASD) faces unique challenges in many international contexts. ASD-specific initiatives have called for the need to (a) understand the etiology of ASD from a global perspective, (b) increase the availability of evidence-based intervention across the lifespan, and (c) increase ASD knowledge and decrease stigma particularly in low- and middle-income countries (LMIC; Khan et al., 2012). To meet these important goals, essential global policy

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changes, increased numbers of trained support personnel across a range of professional disciplines, and greater coordination of care must all occur (Hahler & Elsabbagh, 2015; Khan et al., 2012). Additionally, though only a modest amount of research has examined how culture impacts global ASD service provision (Daley, 2002), this type of science is an essential first step to successfully improving interdisciplinary quality of care for individuals with ASD.

Increasing research shows that a failure to account for known cultural differences in behavior can result in diagnostic and treatment seeking inequities (Harrison, Long, Tommet, & Jones, 2017; Ravindran & Myers, 2012). Thus, considering the role of culture should be at the forefront of efforts to globally disseminate best practices for individuals with ASD and should shape how clinicians adapt interventions and interact with families. Research and clinical efforts have resulted in some international dissemination in domains of ASD screening and surveillance, diagnostic evaluation, and intervention, thus these will be the focus of the current chapter.

The successful efforts to improve ASD quality of care across the international landscape arise from a necessary partnership between stakeholders and providers of all backgrounds. Although coordination of care remains at the forefront of best practices for individuals with ASD, this concept has a different meaning in LMIC, where shortages in medical, psychological, behavioral, and educational providers have been documented in countries around the world such as Tanzania (Manji & Hogan, 2014), Kenya (Ndetei et al., 2007), Nepal (Shrestha & Santangelo, 2014), Ethiopia (Tilahun et al., 2017), and China (Wu Cai Lu Autism Research Institute, 2019). Parents in these resource-low countries play a particularly important role, not only with regard to service coordination for their own child, but also in making gains to increase (a) local ASD research, (b) empirically supported treatments, and (c) positive beliefs and knowledge about ASD (Silverman & Brosco, 2007). One strategy emphasizes that meaningful progress toward improving ASD global care comes from a combination of bottom-up and top-down participation from families, professionals, local leadership, non-government organizations (NGOs), and government agencies (Wallace et al., 2012).

Global Considerations in Screening and Surveillance

Early intervention for individuals with ASD increases opportunities for optimal developmental outcomes (Estes et al., 2015), and is more cost-effective compared to late-start intervention (Koegel, Koegel, Ashbaugh, & Bradshaw, 2014). A prerequisite for early intervention is early identification. Although early identification has been vigorously promoted in high-income Western countries by means involving screening and surveillance systems (Zwaigenbaum et al., 2015), there are still many challenges to overcome globally.

Best Practices in Screening

Timing of early identification: Interracial and international disparities. In the United States (US), it is recommended by the American Academy of Pediatrics (AAP) that young children should be screened for ASD at 18 and 24 months of age (Zwaigenbaum et al., 2015). However, there is not always a seamless transition between initial identification and diagnostic confirmation. Research consistently reports large gaps between initial identification and actual diagnosis (2.7-3.7 years; Shattuck et al., 2009). Significantly, many non-pathological factors were shown to impact the timeliness of early identification, including race/ethnicity, cultural background, and social-economic status. In the US, disparities were found such that Black children with autistic disorder received a diagnosis and entered the mental health system at a later age compared to White peers (Mandell, Listerud, Levy, & Pinto-Martin, 2002). Moreover, having > 4 primary care physicians preceding diagnosis delayed diagnosis by 6 months, which indicates the importance of pediatric care continuity (Mandell, Novak, & Zubritsky, 2005). Overall, reliable and timely early detection rely on the coherence and coordination within and across standardized screening system and specialized care provision (see also, chapter "Screening and Surveillance").

The same concern may apply to countries/regions, where ASD prevalence estimates have been historically lower compared to Western developed countries (Elsabbagh et al., 2012). Unfortunately, it is virtually impossible to report the timing of early identification of ASD in most non-Western developing countries/regions due to the scarcity of reliable population-based surveillance. Nonetheless, lower prevalence estimates and tendency of late diagnosis in these countries have been documented (Onaolapo & Onaolapo, 2017), which are often associated with limited service availability (Pang et al., 2018). Also, standardized primary care developmental screening for ASD is limited to nonexistent in many lower income countries/regions, for instance, Pakistan (Imran & Azeem, 2014), Nepal (Shrestha & Santangelo, 2014), China (Huang, Jia, & Wheeler, 2013), and sub-Saharan Africa (Chambers et al., 2017).

Different roles of distinct providers in conducting screenings. There are often shortages of health facilities and personnel in lower income and/or remote areas (Huang et al., 2013; Janvier et al., 2016; Oro, Esmer, & Navarro-Calvillo, 2014). Ideally, each toddler should be screened for ASD and developmental delays at routine pediatric checkup following AAP recommendations; however, this model is infeasible in many countries (Huang et al., 2013; van de Vijver & Tanzer, 2004). Integrating screening into routine primary health care is an important target for expanding care access (Collins et al., 2011). One potential solution is to have other service providers participate in various forms of developmental surveillance in community settings. In Australia, health nurses were trained to identify behavioral red flags of ASD in infants as part of a developmental surveillance system. This approach capacitated the community to accurately identify ASD as early as 12 months (Barbaro & Dissanayake, 2010). Janvier et al. (2016) explored the feasibility of early screening

administered by childcare providers in underserved communities and demonstrated promising results. Finally, community health care workers providing decentralized mental health care in Ethiopia have begun receiving ASD screening training to help with broader identification (Tilahun et al., 2017). These models and those in chapter "Developmental Screening in Community-Based Settings" provide examples for innovative approaches for increasing early detection.

Cross-culturally adapted measures. Second only to the timing of screening, the method of screening is of great importance, and a range of empirically supported early screening instruments exist (Dumont-Mathieu & Fein, 2005). Given that most early identification instruments were developed under Western cultures in English speaking countries, it is important to keep in mind potential biases in behavior sampling and cross-cultural validity of these instruments (Norbury & Sparks, 2013). One widely used ASD-specific screening tool is the Modified Checklist for Autism in Toddlers (M-CHAT; Robins, Fein, Barton, & Green, 2001). This measure has demonstrated high sensitivity and specificity for the early identification of young children with ASD (Robins et al., 2014; Robins et al., 2001).

The M-CHAT has been translated to multiple languages. However, lower positive predictive value (PPV) has been observed in Spain, Japan, and Sri Lanka (Canal-Bedia et al., 2011; Inada, Koyama, Inokuchi, Kuroda, & Kamio, 2011; Perera, Wijewardena, & Aluthwelage, 2009). These differences might reflect comparably lower prevalence in the distinct or be indicative that the M-CHAT was simply not adequate in describing ASD-specific behaviors of unique cultural contexts. A Chinese study demonstrated adding a short observation checklist significantly improved sensitivity, specificity, and PPV (Wong et al., 2004). The above studies suggest that when applying a measure internationally, caution should be taken regarding the cross-cultural validity in its description of ASD-specific behaviors.

Best Practices for Cultural Adaptation and Validation

Developing a novel, high-quality assessment requires abundant expertise and labor. Using culturally adapted measures is often much easier for many researchers and practitioners but is also time intensive. Readying an instrument for use in a new cultural contexts often begins with translation, for which specific considerations should be taken: (1) using simple sentences; (2) avoiding pronouns; (3) avoiding metaphors; (4) avoiding passive tense; (5) avoiding hypothetical phrasing (Werner & Campbell, 1970). Bracken and Barona (1991) recommended a combination of adaptation and translation in alignment with the following steps: (1) Translation from original to target language by a bilingual who is sufficiently knowledgeable; (2) blind back-translation and a repetition of this step if necessary; (3) Bilingual review committee to minimize cultural and linguistic inappropriateness; (4) pilot testing; (5) field testing; (6) norm development; (7) cross-cultural validation examining psychometric properties. It is important to note that the function of back-translation is to check semantic equivalence between the original and translated measures, thus it should only be done

after a thorough scrutiny of the translation by experts and target population (Borsa, Damásio, & Bandeira, 2012).

Other Cultural Variables: Knowledge and Stigma

Culture influences how people accept and view disabilities such as ASD (Ravindran & Myers, 2012). For instance, a survey discovered that in China 53–69% of people conceptualized autistic children as intellectually disabled and extremely impaired, whereas in the US only 13–21% of people did so (Yu, Stronach, & Harrison, Submitted). Negative perceptions of ASD or ASD stigma can greatly impact early identification efforts. High proportions of Ethiopia parents of autistic children experienced stigma (45.1%) and tried to hide the condition of their child (Tilahun et al., 2016). In South Korea, a study showed that parents were afraid of disclosing the needs of their autistic child due to fear of losing educational opportunities (Grinker et al., 2012).

In many instances stigma derives from low levels of ASD knowledge. For example, stigma often accompanies beliefs of the spiritual causation of ASD in many African countries that exemplify low ASD resource regions. Historically there has been a lack of access to knowledge and training for professionals and caregivers (Ruparelia et al., 2016). In settings where screening and surveillance systems are yet to be established, detection of ASD usually depends on the sensitivity of caregivers and other stakeholders at the community level who may delay diagnosis due to reasonable concerns about stigmatization. Thus, it is important for researchers and care providers to be aware of the cultural variables that can hinder early ASD screening efforts, as well as later diagnosis and treatment seeking. At the community level, public education campaigns in LMIC are needed to reduce misunderstanding and stigma. At the institutional level, coordinated effort should be made to establish the infrastructure for early screening and referral systems and to promote their importance (Ruparelia et al., 2016).

Diagnostic Evaluation in the International Context

Similar to ASD early screening, several meaningful issues arise when applying diagnostic classification approaches developed in high-income, Western countries to other global contexts. Individuals across a range of disciplines must consider how to adapt ASD evaluations, while maintaining important psychometric rigor. Additionally, given the social nature of ASD symptoms, careful attention must be paid to how symptom presentation may vary across cultural and linguistic contexts (see chapter "Clinical and School Identification and Intervention for Youth with ASD: Culturally and Linguistically Responsive Interdisciplinary Considerations"). Importantly, the evolution of the ASD diagnostic criteria over time and the variability

between diagnostic classification systems impacts the process of conducting ASD diagnostic evaluations across the international canvas.

Global Perspectives in ASD Diagnostic Criteria

Global Diagnostic Classification Systems. ASD criteria vary depending on adherence to the US classification system, the Diagnostic and Statistical Manual (DSM-5; American Psychiatric Association, 2013), or the more internationally used criteria published by the World Health Organization, the International Classification of Diseases: tenth revision, 2nd edition (ICD-10; World Health Organization, 2004). The more recent publication of the DSM-5 resulted in noteworthy changes to the ASD diagnostic criteria, which results in a lack of synchronization with ICD-10 (Doernberg & Hollander, 2016). These differences impact how countries report health statistics, healthcare processes (i.e., insurance billing codes), and clinical diagnostic procedures, thus resulting in different diagnostic profiles (Clark, Cuthbert, Lewis-Fernández, Narrow, & Reed, 2017). Although the DSM-5 changes represent important evidence-based forward progress in many domains, cultural considerations were not necessarily at the forefront of the ASD criteria revision (Clark et al., 2017), which can introduce bias in the diagnostic process from the outset.

ASD Diagnostic Evaluation Best Practices. ASD diagnostic evaluation is a complex process comprised of multiple components, and often most effective from the perspective of an interdisciplinary team involving both parents and professionals (Prelock, Beatson, Bitner, Broder, & Ducker, 2003). A core ASD diagnostic assessment battery includes both an observation-based ASD diagnostic instrument and ASD-specific parent interviews and questionnaires to evaluate for the presence of the ASD symptoms (Ozonoff, Goodlin-Jones, & Solomon, 2005). Measures of cognition, language, and adaptive functioning provide additional essential information for evaluating the dimensional level of clinical impairment. Additional domains of frequent impairment in ASD that may also require evaluation include neuropsychology, attention, executive functioning, academic achievement, and psychiatric comorbidities (Ozonoff et al., 2005). Implementation of the core battery might necessitate multiple providers with distinct training, but an evaluation of additional domains would inevitably require the expertise of an interdisciplinary team.

Unfortunately, in many parts of the world, great challenges exist trying to identify one professional with ASD expertise let alone multiple providers to serve on an interdisciplinary evaluation team. Parents from LMIC report challenges with identifying multidisciplinary ASD specialist teams and finding sufficient ASD services (e.g., Divan, Vajaratkar, Desai, Strik-Lievers, & Patel, 2012; Shrestha & Santangelo, 2014). A general shortage of ASD specialists in LMIC has a clear foundation in the literature (Manji & Hogan, 2014; Ndetei et al., 2007).

Cross-Cultural Variability in ASD Diagnosis

Sociocultural variability in behavior. Different cultures promote different norms in social behavior. Thus, considering the sociocultural context is particularly important in identifying a disorder, such as ASD, with social impairment at the core. Differences arise in a myriad of behaviors included as core aspects of the ASD differential diagnostic picture, such as eye contact, pragmatic language, emotion expression and recognition, and nonverbal communication. These differences result in part, because young children from different culture groups use distinct cultural and linguistic norms to guide their social communicative actions and perceptions (Tomasello, Kruger, & Ratner, 1993).

More specifically, different cultures have specific norms for when and how to engage in eye contact and other nonverbal communication (Collett, 1971; Knapp, Hall, & Horgan, 2013). Known cultural differences in emotion recognition also exist (Elfenbein, 2013; Elfenbein, Beaupré, Lévesque, & Hess, 2007). This may be attributable to attentional face processing differences or differences in aligning facial cues with basic emotions (Jack, Garrod, Yu, Caldara, & Schyns, 2012). Finally, many aspects of language, particularly pragmatic language, have known cultural variations (Carter et al., 2005).

Cultural Biases in ASD Diagnostic Instruments. Despite the documentation of these differences, little research has quantified sociocultural differences in young children in a way that can be meaningfully applied to assessment development. This poses a particular problem for ASD diagnostic tools often reliant on directly observing behavior to diagnose ASD and comparing it to operational definitions of typical and atypical behavior. Unfortunately, as is common in the field, much of the research to develop ASD diagnostic instruments and collect normative data has relied primarily on samples comprised of White, Western males that represent one, narrow sociocultural group (Hilton et al., 2010). This narrow definition of typical behavior can result in important measurement biases in widely used ASD diagnostic instruments (Harrison et al., 2017) and thus, a tendency to over pathologize behaviors that may simply reflect different cultural norms (Norbury & Sparks, 2013). As such, the field should prioritize research from a range of disciplines that helps to better understand the nature of sociocultural differences and how to account for this variability in instrument development and adaptation.

Cultural Biases in the Diagnostic Context. Meaningful bias can also occur in the interactive evaluation context. In the US, contributing to diagnostic timing disparities, Black children have a higher likelihood of receiving an incorrect initial diagnosis of Attention Deficit/Hyperactivity Disorder (ADHD) or conduct disorder rather than ASD (Mandell, Ittenbach, Levy, & Pinto-Martin, 2007). This pattern of misdiagnosis may reflect implicit clinician biases resulting in a tendency to assume behavior is the result of externalizing behavior disorders rather than ASD. In addition to ethnic minority disparities, females with autistic symptoms often do not receive a diagnosis due to a clinician's tendency to narrowly view the presentation of ASD

(Kirkovski, Enticott, & Fitzgerald, 2013). Caregiver perception of behavior and personal values have cultural underpinnings that can also impact the diagnostic process in how readily parents endorse problems (e.g., Matson et al., 2017). Mandell et al. (2009) reported that lower maternal education decreased the odds of documented ASD. Promoting increased awareness of how cultural differences impact the diagnostic process among clinicians can help buffer biased interactions (Ennis-Cole, Durodoye, & Harris, 2013).

Global Dissemination of ASD Interventions

The term intervention in relation to ASD includes a broad range of approaches including child-based approaches, parent-focused interventions or sometimes a combination. There is growing evidence supporting a range of ASD-specific interventions, which highlights the importance of coordinated care (Bearss, Burrell, Stewart, & Scahill, 2015). We will examine global issues related to: (a) Cultural Considerations in Implementation, (b) Cross-Cultural Adaptation of interventions, and (c) Parent-Based Interventions.

Cultural Considerations in Intervention Implementation

Implementation science is increasingly gaining attention as researchers seek to better understand the barriers and facilitators that enable evidence-based interventions to be effectively provided in multiple and diverse settings (Schlebusch et al., in press; Stahmer, Dababnah, & Rieth, 2019). Implementation science is a method of enquiry designed to support investigators in determining whether interventions or approaches have utility in real-world settings (Damschroder et al., 2009). The evidence for the majority of ASD interventions results from research conducted in high-income countries despite the majority of those with ASD living in LMIC (Franz, Chambers, von Isenburg, & de Vries, 2017). The significant treatment gap that exists in most LMIC countries necessitates an increased focus on how best to implement, adapt, and disseminate evidence-based treatments in settings that are different to those for which they were originally intended (Damschroder et al., 2009).

The impact of culture on ASD treatment-seeking. An array of research has highlighted that diverse cultural groups have differing perspectives on the etiology of ASD (Ennis-Cole et al., 2013; Hebert & Koulouglioti, 2010). The etiological understanding of ASD will inevitably inform beliefs about treatment. For example, some minority parents may regard problems with social skills or language delays as a temporary phenomenon that will be outgrown (Danseco, 1997) and some Latino mothers have reportedly viewed ASD as a gift from God that enables them to serve others (Wilder, Dyches, Obiakor, & Algozzine, 2004). With such beliefs, parents may not seek treatment. Differences also exist in thresholds for treatment seeking.

For example, Asian Americans are reportedly less likely to seek professional help until they are unable to manage (Dyches, Wilder, Sudweeks, Obiakor, & Algozzine, 2004).

In addition to the difference in initial treatment seeking behaviors, individuals from different cultural groups may seek treatment from different types and combinations of sources (Sue & Sue, 2008). For example, African Americans tend to first seek aid from personal connections and Latino Americans may work with folk healers instead of medical professionals. Given the number of cultural groupings worldwide, significantly more research is required in this area to understand variability in culturally linked treatment seeking behaviors (Ennis-Cole et al., 2013).

Cultural Considerations for ASD Providers. If therapists and educators are to work effectively with caregivers and parents from culturally diverse and nondominant cultures an understanding of the impact of culture on their communication and learning is needed (Trembath, Balandin, & Rossi, 2005). Both patient and provider cultural impact the course of treatment. Thus, professionals working with individuals with ASD should employ approaches that creatively meet the needs of the culturally diverse groupings they serve through increased personal awareness, cultural knowledge, and flexible use of skills (Ennis-Cole et al., 2013).

Culturally Appropriate ASD Intervention Implementation Approaches

Cross-cultural adaptation of clinician-based interventions. Given the significant treatment gaps described previously in the majority of LMIC, the consideration of cross-cultural adaptation of clinician-based interventions is increasingly regarded as a priority (Chambers & Norton, 2016; Schlebusch, in press). More than 200 members of the International Society for Autism Research (INSAR) helped to identify ASD research priorities and knowledge gaps (Vivanti et al., 2018). Of the six key issues raised, five are pertinent to cross-cultural adaptation and highlight the need for increased awareness of implementation and cultural diversity in this area of research. The relevant key issues summarized include: (a) a focus on the feasibility of treatment procedures and alignment with stakeholder values, (b) research designs that compare different interventions and formats, (c) use of community-partnered participatory research to guide adaptation, (d) inclusion of implementation constructs in treatment trials, and (e) an iterative approach to the progression of knowledge from intervention development to implementation.

Cultural adaptations can be required when the target audience is different from that of the original intervention or program (Schlebusch et al., in press). The aim of any adaptation, including clinician-based, is to improve the effectiveness of the intervention by ensuring accessibility, feasibility, and acceptability for the cultural group though still maintaining fidelity (Chambers & Norton, 2016; Schlebusch et al., in press).

A good example of identifying stakeholder perspectives, feasibility, adaptation, and implementation in adaptation is the research on the parent perceptions of a parent-implemented Naturalistic Developmental Behavioral Intervention (NBDI; Stahmer et al., 2019). While NDBI have been shown to have positive effects, effectiveness in community settings has had little examination (Kasari et al., 2014). After following 13 families as they received training in a specific NDBI, one study concluded that such a training by community providers is feasible and well received, and explored adaptation of specific elements of the program based on participant feedback (Stahmer et al., 2017). Although this study is limited by a small sample, it provides an important example of how research investigating stakeholders' perspectives leads to program adaptation and can facilitate successful implementation in different communities or cultures.

Emphasizing the Use of Parent/Caregiver-based Interventions. Developing effective treatments that can be used by nonspecialists is regarded among the top research priorities for improving the lives of those with intellectual disabilities and lower functioning ASD (Reichow, Servili, Yasamy, Barbui, & Saxena, 2013). Research supports the efficacy of delivery by nonspecialist providers and the importance of such approaches given the previously mentioned scarcity of specialists in LMIC. There is an increasing focus on empowering parents to provide and engage in a range of intervention approaches (Irwin, Siddiqi, & Hertzman, 2007; Kasari et al., 2014; Nevill, Lecavalier, & Stratis, 2016).

Bearss et al. (2015) provide a useful taxonomy to distinguish between the myriad of ASD interventions and training involving parents/caregivers. The framework outlines a distinction between "Parent Support" programs, "Parent/Caregiver-Mediated Interventions", as well as interventions with a component of both known as Parent Education & Training (PET; Dawson-Squibb & de Vries, 2019). A recent scoping review of PET interventions outside of the US identified a highly diverse range of programs from 20 countries and all continents except South America (Dawson-Squibb et al., 2019). This review highlighted the diversity and range of programs that are delivered around the globe, but also revealed the need for methodological quality improvements due to a failure to consider implementation factors and a lack of research focus on cultural factors. This gap is an important barrier to these needed interventions being successfully disseminated in culturally diverse settings.

Cultural Adaptation and Translation of Outreach Materials on Autism Spectrum Disorder. Adaptation of interventions to ensure their acceptability and accessibility is required in different cultural settings (Bernal & Rodriguez, 2012) and should align with previously discussed published translation and adaptation standards (e.g., Bracken & Barona, 1991). This process for interventions may require even greater time and input from a diverse group of stakeholders. Grinker et al. (2015) provide a useful illustration of the cultural adaptation through qualitative methods and translation of a US parent intervention (Autism Speaks First 100 days kit) into another language (Korean). The importance of cultural consensus modeling was determined as necessary and provided information about barriers to care. This emphasizes the importance of including relevant stakeholders when considering cultural adaptations, ensures the prioritization of intervention acceptability, and provides a clear conceptual model and methodology for adapting programs to make them culturally acceptable.

Final Overview

In line with the World Health Organization (2013) report, international ASD service provision progress requires substantial attention, particularly in LMIC. Improving global ASD assessment and intervention remains a key focus for researchers, policy-makers, clinicians, educators, and families and must occur through coordinated efforts. To inform progress, research needs to focus on diverse, international samples to more clearly delineate cultural differences in ASD beliefs and stigmas, sociocultural variability in symptom domains, and treatment attitudes. A failure to understand these culture differences and how they impact the diagnostic assessment process and treatment-seeking can result in diagnostic inaccuracies and delays in essential early treatment. Efforts to ensure an awareness of how culture impacts on the uptake of assessments and interventions, and how best they should be adapted for diverse cultures and communities should be considered a priority. This complex area requires the attention of relevant stakeholders from a range of disciplines to come up with creative ways to meet the significant needs of many underserved and marginalized communities and is critical to the successful implementation of empirically supported services. Cultural factors should be considered from the early development of assessments and interventions, and cross-cultural transadaptation should be done in conjunction with stakeholders who can ensure it is accessible and acceptable. This process of engagement and finding ways to creatively meet the needs of communities should be considered an ongoing process that engages individuals involved in all levels of ASD care. Wider implementation of models like the Global Autism Public Health initiative that focuses on the engagement of a wide range of stakeholders to most effectively promote change aligns with this goal (Wallace et al., 2012). Similarly, work to establish universally cross-culturally applicable assessment and intervention approaches like World Health Organization recent progress developing a parent training approach is an important step forward (Hamdani et al., 2017).

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