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Between Barriers and Possibilities: The Medical Experience in Communication with Non-Speaking and Minimally Speaking Autistic Children †

João Pedro Rodrigues Brandão and Marcos Venicio Esper *

Curso de Medicina, Unidade Passos, State University of Minas Gerais (UEMG), Passos 37900-106, Brazil; joao.2412111768@discente.uemg.br

* Correspondence: marcos.esper@uemg.br

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Abstract

Communication is central to clinical care, yet spoken-language-centered encounters may not accommodate autistic children who use few or no functional spoken words. This narrative review discusses barriers and potential supports for communication in pediatric healthcare. For this paper, "non-speaking" refers to children who do not use functional spoken words consistently to communicate; "minimally speaking" refers to children who use a small, inconsistent repertoire of functional spoken words and rely substantially on other modalities. These are descriptive terms, not DSM-5-TR or ICD-11 diagnostic categories, and do not imply a particular intellectual profile or level of receptive language. The review draws on institutional guidance and research on healthcare access and communication interventions. Themes include professional preparation, sensory and organizational barriers, recognition of individualized communication, augmentative and alternative communication (AAC), environmental adaptation, and caregiver partnership. Evidence specific to medical consultations remains limited; therefore, recommendations for clinical settings are identified as implications rather than direct findings where appropriate.

Keywords: autism spectrum disorder; non-speaking; minimally speaking; augmentative and alternative communication; healthcare communication

1. Introduction

Autism spectrum disorder (ASD) is a neurodevelopmental condition characterized by differences in social communication and interaction and by restricted or repetitive patterns of behavior, interests, or activities. Autism is heterogeneous: language, intellectual functioning, sensory characteristics, and support needs vary widely between individuals [1,2].

This paper uses "non-speaking" and "minimally speaking" as operational, descriptive terms. "Non-speaking" means that a child does not use functional spoken words consistently for everyday communication; "minimally speaking" means that a child uses a limited or inconsistent set of functional spoken words and depends substantially on gestures, signs, pictures, writing, or communication technology. The empirical literature establishes that these categories are not formal DSM-5-TR or ICD-11 diagnoses, and clinical research does not use a single standardized threshold to classify these groups [3,4]. Instead, they describe expressive spoken-language use only; robust cohort studies demonstrate that receptive language abilities vary widely and must be assessed individually, as comprehension cannot

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be inferred from structural speech output [5]. Intellectual disability frequently co-occurs, but it is neither required nor excluded by these communicative definitions [4].

Where a cited study uses its own definition, that study's definition takes precedence.

The focus is pediatric care, particularly children from preschool through the school-age years (approximately 2–11 years). The clinical guideline CG170 from the National Institute for Health and Care Excellence (NICE, 2021) [6] covers broader healthcare pathways for individuals under 19, and these expanded age ranges are explicitly stated when institutional frameworks are referenced. The review does not assume that one communication profile or strategy applies to every child.

The medical encounter may involve unfamiliar routines, sensory demands, time constraints, and spoken-language expectations. This paper considers communication as multimodal and shaped by the child, communication partners, environment, and available supports.

2. Objective

The aim is to discuss reported barriers to communication with non-speaking and minimally speaking autistic children in healthcare and to distinguish evidence reported in the literature from clinical implications proposed by the authors.

3. Methodology

This study is a narrative review, structurally designed as an integrative review following the methodological framework and rigorous elements outlined by Sukhera [7]. This specific narrative typology was selected because the research objective requires a meaningful synthesis of the complex, broad, and multidisciplinary literature—encompassing experimental trials, qualitative investigations, and institutional guidance—which cannot be adequately captured by a narrow systematic framework. Consequently, this review addresses the following central research question: What are the primary communicative barriers faced by non-speaking and minimally speaking autistic children during pediatric medical encounters, and what actionable strategies or alternatives exist within the literature to facilitate clinical communication?

A targeted, iterative literature search was initially performed in August 2026. To ensure the inclusion of the most contemporary evidence and address formal peer review recommendations, a structured update was executed on 28 September 2026 using PubMed/PubMed Central and the official web repositories of the World Health Organization (WHO) and the National Institute for Health and Care Excellence (NICE). Search concepts, combined using Boolean operators (AND/OR), included: "autism" OR "autistic"; "nonverbal" OR "minimally verbal" OR "non-speaking"; "healthcare" OR "medical encounter" OR "healthcare access"; and "augmentative and alternative communication" OR "AAC". Reference lists of relevant reviews were manually scanned to identify seminal and pivotal papers.

Sources were considered relevant and retained if they addressed: (a) healthcare access or communication barriers involving autistic children; (b) communication interventions or AAC modalities in autistic populations with limited spoken language; or (c) official institutional clinical guidance for pediatric autism care. In alignment with the epistemological foundations of narrative synthesis [7], the authors evaluated the adequacy of the reviewed literature based on thematic sufficiency and saturation, rather than an exhaustive or protocol-restricted retrieval. Decisions regarding source inclusion and exclusion were governed by the need to map diverse disciplinary perspectives. This review did not utilize a preregistered protocol, duplicate screening, or formal risk-of-bias assessment; studies on communication interventions outside medical settings were explicitly retained to inform cautious clinical implications, rather than as direct evidence of clinical effectiveness within the consultation room.

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4. Conceptual Mapping of the Reviewed Evidence

Table 1 summarizes how selected sources relate to the target population, principal findings, reported barriers or facilitators, and cautious clinical implications. This structured mapping serves as the analytical baseline from which the subsequent thematic synthesis and critical discussion are derived.

Table 1. Evidence-to-implication map. The final column represents the authors' clinical synthesis and should not be read as an outcome directly tested by every cited source.

Source	Population/Scope	Principal Finding	Barrier/Facilitator	Clinical Implication (Authors' Synthesis)
Corden et al. [8]	Healthcare professionals; autistic people	Review reports gaps in knowledge, self-efficacy, and attitudes	Barrier: professional preparation	Consider autism-specific communication training
Babalola et al. [9]	Healthcare access for autistic children in the UK	Sensory, system-level, and communication barriers recur	Barriers: sensory and service context	Individualize sensory and organizational adjustments
Brignell et al. [10]	Minimally verbal autistic children, 32 months–11 years	Two RCTs; very low certainty, limited evidence	Facilitator under evaluation: communication intervention/AAC	Avoid claims of established or universal effectiveness
Donato et al. [11]	AAC use by autistic children and communication partners	Partner-related barriers/facilitators discussed	Facilitator: partner familiarity with AAC	Extrapolate cautiously to clinicians and consultations
WHO [1]; NICE [6]	Diagnostic guidance/children and young people	Autism and support needs are heterogeneous; care should be adapted	Facilitator: individualized, accessible care	Assess expressive and receptive communication individually

5. Discussion

5.1. Barriers in Medical Encounters

Professional preparation is a recurring concern. A systematic review found gaps in healthcare professionals' knowledge, confidence, and attitudes regarding autistic people [8]. NICE guidance also emphasizes adapting care to individual communication and sensory needs [6]. These sources support attention to autism-specific training; they do not establish that every clinician or curriculum is inadequately prepared. Caregiver input can be valuable, but relying exclusively on caregivers may leave the child's own signals insufficiently explored.

Sensory and service-level barriers are described in research on healthcare access for autistic children. A UK systematic review identified sensory issues, system constraints, and communication difficulties involving patients, providers, and parents [9]. specific effects of lighting, noise, waiting, and touch will vary by child; adapting these conditions is a reasonable individualized consideration rather than a guaranteed intervention.

A further concern is the fit between standard consultation routines and the time or modalities a particular child needs. This review treats rigidity of consultation formats as a synthesis and clinical interpretation of the literature on service constraints and communication access, rather than as a separately established finding of a single cited study. Longer appointments, flexible sequencing, or visual supports may be considered where feasible.

Recognition of non-spoken communication is another clinical concern. A gesture, vocalization, change in posture, or movement toward a body part may carry meaning for an individual child, but its meaning cannot be assumed without context. The recommendation to attend to such signals is an authorial clinical implication grounded in a multimodal view of communication; the sources reviewed do not quantify how often clinicians miss these signals during consultations.

5.2. Possibilities for Supporting Communication

Augmentative and alternative communication (AAC) refers to methods that supplement or provide alternatives to spoken communication. Unaided AAC includes forms such as gestures and manual signs; low-technology-aided AAC includes picture cards, communication boards, and visual schedules; high-technology-aided AAC includes apps and speech-generating devices. The appropriate modality is individual and may be used alongside speech.

Evidence for communication interventions in minimally verbal autistic children remains limited and heterogeneous. The Cochrane review by Brignell et al. [10] included two randomized trials with 154 children aged 32 months to 11 years and rated the overall evidence as very low quality; findings did not show sustained improvement for most children. AAC may support communication for some children, but the evidence does not justify describing it as uniformly effective or as one of the most consistently supported strategies across settings.

Donato et al. [11] synthesized barriers and facilitators to AAC use by autistic children and their communication partners. Their review was not specific to medical consultations. Applying its discussion of partner knowledge and implementation to healthcare is therefore an extrapolation: clinicians may need to learn how a child's existing system works and allow it to be used during the visit. This is a plausible practice implication, not a direct finding from that study.

Koegel et al. [12] reviewed interventions for non-speaking and minimally speaking autistic individuals. Because intervention settings and approaches differ from medical encounters, those findings should not be interpreted as proof that a given intervention improves communication during consultations. Clinical teams can nevertheless ask families which modalities the child already uses and, where appropriate, make them available.

When contrasting these selected sources with the broader neurodevelopmental literature, a significant translational gap becomes apparent. While robust educational and speech-language research consistently validates AAC for long-term linguistic and cognitive development, its operationalization within acute, time-limited medical encounters represents a distinct challenge. To strengthen the clinical utility of this synthesis, it is essential to examine which specific AAC strategies can be realistically implemented during a pediatric consultation. Low-technology-aided modalities, specifically core-vocabulary communication boards and customized visual schedules, offer the highest clinical viability. These tools do not require device configuration, are immune to battery or software failures, and can be easily sanitized between appointments. For instance, a medical-specific communication board containing universal symbols for pain, body parts, and basic needs (e.g., "stop", "yes/no", "hurt") allows the non-speaking child to express immediate physical states without relying exclusively on caregiver interpretation.

Furthermore, high-technology-aided AAC, such as speech-generating applications on tablets, should not be discounted, but their effectiveness in the consultation room depends heavily on "partner-augmented input" or aided language modeling. Clinicians cannot expect a highly dysregulated child to independently navigate a complex digital folder system in an unfamiliar, sensory-overwhelming environment. Instead, the medical practitioner

must actively model the device, pointing to symbols while speaking (e.g., pointing to the "look" or "check" icon before examining the child's ears). This active modeling by the clinician mitigates the partner-related barriers identified by Donato et al. [11] and directly addresses the systemic communication failures reported by Babalola et al. [9]. Ultimately, while direct empirical trials evaluating AAC within medical consults are scarce, synthesizing these adjacent fields suggests that the immediate efficacy of AAC in healthcare is less about accelerating child acquisition and more about enhancing the clinician's communicative flexibility and reducing situational anxiety.

Environmental adjustments may include reducing avoidable noise or bright light, explaining steps with visual supports, allowing processing time, and preparing the child before touch or procedures. NICE guidance supports adapting care to the person's needs [6]. These are individualized options, not a one-size-fits-all protocol.

Caregivers can help clinicians understand a child's communication signals, preferences, pain behaviors, and sources of distress. Their contribution should complement, rather than automatically replace, direct engagement with the child in the child's available modality. Collaboration with speech-language therapists and occupational therapists may help services develop individualized communication plans; these are clinical recommendations derived from the review, not outcomes tested by this narrative paper.

5.3. Implications for Clinical Practice and Training

The reviewed literature supports recognizing communication as multimodal and adapting care to individual needs. The strength of evidence differs by topic: healthcare-access reviews directly describe barriers in healthcare, whereas AAC intervention reviews largely concern non-medical contexts. Accordingly, training, sensory adaptation, caregiver partnership, and access to a child's established communication tools are proposed as practical considerations, while their effectiveness in medical consultations requires direct evaluation.

6. Limitations

This narrative review is not systematic and may omit relevant studies. Definitions of non-speaking and minimally speaking vary across research, and evidence from educational or home interventions cannot automatically be generalized to medical consultations. The conceptual map makes this distinction visible but does not constitute a formal evidence-grading framework.

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