children

MDPI

Article

Bridging the Gap in Primary Care for ASD: A Parallel Cross-Perspective Analysis of Physician Self-Efficacy and Parental Perceptions

Patryk Domarecki [1] and Katarzyna Plata-Nazar [2,*]

[1] Butterfly—Center for Development Support Foundation, Kujawska 8/5A, 14-300 Morag, Poland; praktyka.domarecki@gmail.com
[2] Department of Pediatrics, Gastroenterology, Allergology and Nutrition, Medical University of Gdansk, Nowe Ogrody 1/6, 80-803 Gdansk, Poland
* Correspondence: knazar@gumed.edu.pl

Highlights

What are the main findings?

- Higher physician self-efficacy was associated with lower situational anxiety and with more frequent use of autism-adapted clinical strategies; physicians reported greater situational anxiety than parents perceived in the attending physician.
- Across two independent, non-linked samples, physicians reported delivering routine clinical strategies more often than parents reported receiving them, while parents' reports of structural accommodations were uneven, with provider continuity reported most frequently and priority first-slot scheduling least frequently.

What are the implications of the main findings?

- Systemic accommodations: suggested. The observed pattern points to institutionalized structural reforms (e.g., priority scheduling, care continuity) as a direction for future evaluation rather than a solution established by this study.
- Standardized communication tools: proposed. Standardized checklists and structured consultation protocols are proposed as directions suggested by the observed pattern; their effect on the difference between physicians' and parents' reports was not tested in this design.

Abstract

Background: Autism spectrum disorder carries a psychiatric-comorbidity burden that, depending on the sample, reaches 70–83%—placing the condition at the center of routine child mental-health service delivery. Primary care physicians act as gatekeepers, care coordinators, and frequently the de facto first mental-health contact, yet the mental-health competencies they bring to consultations with autistic children have rarely been characterized in parallel with the perspective of parents. This study evaluated physician self-efficacy in such consultations and compared physicians' and parents' reports of physician situational anxiety and of the implementation of routine clinical strategies. Methods: Two parallel, web-based surveys were distributed between October 2023 and February 2024 to PCPs ($N = 166$) and parents of children with ASD ($N = 177$) in Poland. Data evaluated demographics, situational anxiety, self-efficacy, and the frequency of utilizing specific autism-tailored clinical accommodations. Results: Among physicians, higher self-efficacy was associated with lower situational anxiety ($\varrho = -0.24$, $p = 0.002$) and with more frequent use of clinical strategies ($\varrho = 0.41$, $p < 0.001$). Physicians reported higher situational anxiety than parents attributed to them ($U = 8545.0$, $Z = -7.49$, $p < 0.001$). Physicians' reports of routine strategy delivery

Check for updates

Academic Editor: Eleni Panagouli

Received: 18 September 2026
Revised: 23 October 2026
Accepted: 27 October 2026
Published: 1 November 2026

Copyright: © 2026 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license.

exceeded parents' reports of receiving them in the three directly comparable domains of clinical strategy use, with a fourth, non-equivalent comparison also differing (physician confidence in adapting the clinical environment versus parental report of the frequency of sensory adjustments); the largest relative difference concerned family-centred needs ($OR = 3.94$, 95% CI 2.06–7.54), followed by the discussion of social difficulties ($OR = 3.18$), the tracking of ongoing external therapies ($OR = 2.70$), and sensory accommodations in the medical setting ($OR = 2.44$). Parental reports also highlighted significant organizational barriers, particularly in priority scheduling. Conclusions: Physicians reported greater situational anxiety than parents perceived in them, and physicians' reports of routine strategy delivery consistently exceeded parents' reports of receiving them. Because the physician and parent samples were independent, these findings indicate different distributions of the two groups' reports rather than within-consultation disagreement. Optimizing primary care for the autistic community may require systemic reforms, standardized communicative checklists, and institutionalized accommodations—directions suggested by the observed pattern that were not tested in the present cross-sectional, self-report design and require future evaluation.

Keywords: autism spectrum disorder; primary care; physician self-efficacy; parental experience; physician anxiety

1. Introduction

Autism spectrum disorder (ASD) is defined as a heterogeneous group of neurodevelopmental conditions characterized by persistent deficits in social communication as well as restrictive and repetitive patterns of behavior [1]. Over the last two decades, the global prevalence of ASD has risen consistently. Large-scale registry studies and meta-analyses indicate that the prevalence of autism in Europe ranges between 1% and 2% [2], although detailed reports from Scandinavian countries document rates up to 2.40—3.13% within the pediatric population [3]. This escalating prevalence introduces an emerging challenge across various medical disciplines, most notably within primary healthcare systems.

The first symptoms of neurodevelopmental disorders manifest as early as infancy, and typically become quite apparent around the second year of life [4]. Clinical literature suggests that a reliable diagnosis of ASD can be established around 2 years of age [5]. However, a comprehensive meta-analysis by van 't Hof et al. revealed that the average age of an ASD diagnosis remains as high as 60.48 months (5 years) [6]. Even in a narrowed analysis of child cohorts under 10 years of age, the average diagnostic age stands at 43 months. This diagnostic gap is profoundly detrimental; studies systematically published worldwide demonstrate that early therapeutic intervention is paramount for the social, behavioral, and cognitive functioning of patients with ASD. For instance, Maksimovic et al. (2023) indicated that initiating intervention between the 3rd and 4th birthdays is significantly more effective in improving symptom-related and language outcomes than delaying therapy until 48–60 months of age [7]. Consequently, due to delayed diagnoses, the early childhood period—which is critical for neuroplasticity—passes in many cases without the implementation of appropriate therapeutic interventions.

Given that early intervention directly correlates with optimized patient outcomes and reduced parental stress [8,9], there is an urgent need for universal, early screening. Primary healthcare physicians are uniquely positioned to spearhead this effort, serving as the frontline "gatekeepers" of the pediatric population [10]. However, effective screening and ongoing care management are heavily dependent on the physician's perceived self-efficacy and emotional burden [11]. Clinicians often face numerous systemic and clinical

barriers, including limited consultation time, inadequate specialized training, and the behavioral complexity of pediatric patients on the spectrum [12,13]. These challenges can undermine doctors' confidence in recognizing early red flags or communicating a suspected diagnosis, thereby generating substantial situational anxiety, and diminishing their perceived self-efficacy in managing ASD care.

Furthermore, comprehensive autism care in primary medicine cannot be evaluated solely from a clinical standpoint; it fundamentally requires a family-centered approach. In fact, a recent study by Domarecki et al. (2024) highlighted a widespread negative assessment of complex ASD pediatric care from the parental perspective [14]. Parents of children with ASD navigate extraordinary administrative, financial, and emotional challenges, making their collaboration with primary care providers critical. Caregiving families require more than routine medical examinations; they rely on physicians to actively track external therapies, address complex social and behavioral difficulties, and provide sensory-friendly accommodations within the clinic [15,16]. When a child presents with co-occurring conditions, such as intellectual disabilities or ADHD, parental expectations and the perceived complexity of the medical encounter intensify [17]. Therefore, exploring the alignment—or misalignment—between physicians' self-reported practices and the actual lived experiences of parents is essential to identifying systemic gaps in autism care.

Importantly, autism spectrum disorder is accompanied by exceptionally high rates of co-occurring psychiatric comorbidity. Estimates from community and epidemiological samples place psychiatric comorbidity at 70–75%, and in psychiatrically referred autistic youth the rate reaches 83%. When children with ASD present to publicly funded mental health services, approximately 92% meet criteria for at least one additional non-ASD Diagnostic and Statistical Manual diagnosis—most commonly attention-deficit/hyperactivity disorder (78%), oppositional defiant disorder (58%), anxiety disorder (56%), and mood disorder (30%) [18]. These figures make clear that the mental-health needs of autistic children are not narrow or domain-specific but span the full range of child and adolescent psychiatric practice, and that meeting them depends on the integrated functioning of child psychiatry, allied mental-health services, and the primary-care clinicians who form the de facto first entry point to the health system.

Where primary-care physicians make first contact with children with ASD, recent diagnostic evidence is sobering: in a prospective North-American cohort, the sensitivity of pediatrician diagnosis for ASD relative to a multidisciplinary specialist team was 0.75 (95% CI 0.67–0.83) and the negative predictive value of pediatrician non-recognition was only 0.60—corresponding to 18 of 72 children ultimately diagnosed with ASD being misclassified by the referring general pediatrician [19]. Each such primary-care consultation therefore doubles as an early mental-health encounter whose accuracy has direct downstream consequences for access to specialized child psychiatric services. Furthermore, recent large-scale birth-cohort analyses indicate that the historical male-to-female incidence ratio of autism has been progressively narrowing across successive birth cohorts, suggesting that female autistic individuals are being identified more frequently—but still less completely—than in earlier decades [20].

This study pursued two distinct aims. First, utilizing a parallel cross-perspective design in two independent, non-linked samples, we aimed to compare physicians' and parents' group-level reports across two core clinical domains: physicians' self-reported situational anxiety versus parental perception of the physician's anxiety, and physicians' reported routine use of clinical strategies versus parents' reports of receiving them. Because the two samples were not matched at the level of individual consultations, these comparisons describe differences between the distributions of the two groups' reports rather than within-consultation disagreement. Second, we characterized, in purely descriptive

terms, the specific structural and organizational barriers—such as care continuity and scheduling constraints—experienced by families within the primary healthcare setting. By indexing both perspectives in a single study, we position each primary-care contact itself as a measurable mental-health service encounter, amenable to system-level improvement.

2. Materials and Methods

The original questionnaires for both physicians and parents were developed specifically for this study by the authors and are provided in full in English as Supplementary Material [see parental questionnaire as Additional File S2 and physicians' questionnaire as Additional File S3]. Prior to wider dissemination, item content was reviewed by two pediatricians, two child psychiatrists, and three parents of children with ASD during the pilot phase to establish preliminary content validity; expert feedback guided item wording, response scale selection, and removal of duplicate items; pilot data were excluded from the final analytic sample.

The physician questionnaire was divided into two sections. The first section gathered demographic and professional data, including age, gender, medical specialty type and status, practice location, years of clinical experience, and family history of ASD. The second section assessed physicians' anxiety, self-efficacy, and clinical strategies using 4-point frequency and confidence scales. Self-efficacy items were rated from 1 = very unconfident to 4 = very confident, and clinical strategy items from 1 = never to 4 = every visit, so that higher values denote greater confidence and more frequent strategy use. The single anxiety item used the same frequency format (1 = never to 4 = every visit), so that higher values denote more frequent self-reported anxiety. Self-efficacy was evaluated through items focusing on physicians' confidence in recognizing ASD symptoms, their knowledge regarding the diagnostic process, their perceived competence in communicating a suspected ASD diagnosis, and their ability to adapt the clinical environment to meet the needs of individuals with ASD. Items regarding clinical strategies addressed the frequency of discussing patients' emotional and social difficulties, ongoing interventions and therapies, and the broader support needs of the patient's entire family system.

Similarly, the parent questionnaire consisted of two sections. The first section focused on parental and child demographic and personal data, including parental age, gender, geographic location, the child's diagnostic subtype and comorbidity, as well as the physician's specialty and the duration of care. The second section focused on the level of the physician's anxiety, resources, and organizational barriers from the parental perspective. The assessment of clinical resources was based on questions regarding the frequency of discussing the child's current social or behavioral difficulties, ongoing therapeutic support, and previously unutilized therapeutic options. Additionally, it evaluated challenges experienced by the family in relation to the child's autism diagnosis, the physician's ability to adapt the sensory environment to the child's needs, explain the steps of the medical examination to the child beforehand, and address the child respectfully. Organizational barriers were assessed through questions regarding the continuity of care provided by a single physician, adherence to scheduled appointment times to minimize waiting room exposure, and the practice of prioritizing children with ASD at the beginning of the clinic queue. Because the three items ask how frequently specific structural and scheduling accommodations were provided, they were reverse-scored so that higher values denote less frequent provision of accommodations, and thus greater organizational barriers. The parental item "perceived physician anxiety" was rated on the 4-point frequency format (1 = never to 4 = every visit), with higher values denoting more frequent parental perception of the physician's anxiety. Although the two items (parental and physician's) share the same response format, they are not directly equivalent: physicians rated how often they

themselves feel anxious, whereas parents rated how often the physician appeared anxious. The full psychometric profile of each aggregated composite—including Spearman inter-item correlations, per-item α-if-deleted and corrected item-total correlations, scale-level Cronbach's α, and principal component analysis outputs (unrotated, Kaiser criterion)—is reported in the Supplementary Materials.

Internal consistency was acceptable for the physician self-efficacy ($\alpha = 0.873$) and clinical strategies ($\alpha = 0.807$) scales and for the parental physician resources scale ($\alpha = 0.830$), but weak for the organizational barriers scale ($\alpha = 0.613$); the parental physician resources scale also showed a two-component structure. The composites were retained for descriptive and exploratory purposes, and these psychometric limitations are reported in the Limitations.

To reach a broad range of physicians and parents, online versions of both questionnaires were disseminated. The link to the physician questionnaire, along with an invitation to participate in the study, was distributed via e-mail to general practitioners and pediatricians registered in professional medical associations and online physician groups. Physicians in current or former practice were asked to report on their clinical practice over the year preceding the survey. The link to the parental version of the questionnaire was disseminated via social media platforms, engaging autistic individuals and their family members as part of the Community Involvement process. Data collection for both groups was conducted between October 2023 and February 2024.

A total of 183 physicians completed the questionnaire; however, 17 were excluded from the analysis due to incomplete responses, resulting in a final sample of 166 medical professionals. The inclusion criteria for physicians were current or former practice within the Polish primary healthcare system (at least part-time) and holding a specialty or undergoing residency training in general practice or pediatrics. A total of 177 participants completed the parental version of the questionnaire. The inclusion criteria for this group required being a parent or legal guardian of at least one individual diagnosed with ASD (regardless of the parent's or child's age) and having the child registered with a primary care physician within the Polish healthcare system.

Ethical approval was obtained from the Bioethical Committee at the Medical University of Gdansk (approval number: KB 511/2023), which complies with the Declaration of Helsinki. Informed consent was obtained from all participants at the beginning of the questionnaire. Prior to completing the survey, every participant was presented with the study's aims and assured of the absolute anonymity of their responses. Participants were also informed of their right to withdraw from the study at any time during data collection without providing any reason.

The questionnaires analyzed in this study are part of a larger, multi-purpose research project on primary care for ASD in Poland, jointly designed by the authors. Two earlier publications reported findings from other subsets of items within the same data collection: the first publication analyzed items related to parental assessment of comprehensive ASD care [14] while the second analyzed items related to physicians' factual knowledge of autism etiology, diagnosis, and support [21]. The present analysis addresses physicians' self-reported self-efficacy, clinical strategies and situational anxiety (physician side), together with parental perception of physician resources, parental perception of organizational barriers, and parental perception of the physician's anxiety (parent side). The recruitment infrastructure, sampling period, and demographic profiles are identical to those previously reported. Because the three reports draw on the same two surveys, the item sets are not entirely disjoint: the parental items on physician resources (Q13–Q16, Q20–Q22) and organizational barriers (Q17–Q19) were also analysed in the earlier parental-view report and are re-used in the present study as components of composite scores and in the cross-perspective comparison. The present analysis is therefore in part a secondary analysis of

items reported previously. The physician items and the parental anxiety item are analysed here for the first time. Table S8 maps each item block analyzed in this study against its publication status in the two earlier reports [Additional File S1].

The physician and parent samples were independent and not linked at the level of individual consultations; no physician–parent dyads were formed, and the two questionnaires did not refer to the same consultations. All cross-perspective comparisons therefore describe differences between group-level reports. The two samples also differed in composition: 59.6% of the physician sample were pediatricians, whereas 71.8% of the physicians described by parents were pediatricians, and 12.0% of physicians versus 31.1% of parents were based in a rural setting. These differences are addressed in the Limitations.

Statistical analysis was performed using StatPlus v.8. To establish the psychometric integrity of the study-developed instruments, the internal consistency of all aggregated scales was evaluated using Cronbach's α. Within the physicians' questionnaire, both composite measures met the conventional reliability benchmark: the perceived self-efficacy scale (4 items) yielded $\alpha = 0.873$, and the clinical strategies scale (3 items) yielded $\alpha = 0.807$. From the parental perspective, the scale measuring perceived physician resources (7 items) showed strong internal consistency ($\alpha = 0.830$), while the organizational barriers scale (3 items) yielded $\alpha = 0.613$, below the conventional 0.70 threshold; findings based on this scale are therefore interpreted as exploratory, and this weak internal consistency is reported as a limitation. Each composite was computed as an unweighted sum of its items, and higher values denote a greater amount of the construct in every case: physician self-efficacy (4 items, possible range 4–16), physician clinical strategies (3 items, possible range 3–12), parental perceived physician resources (7 items, possible range 7–28) and parental organizational barriers (3 items, reverse-scored so that higher values indicate less frequent provision of accommodations, possible range 3–12). Composite sums were used in all inferential analyses. The internal structure of the study-developed composites was examined with principal component analysis on the standardized item-correlation matrix, with components retained according to the Kaiser criterion ($\lambda > 1$); no rotation was applied. For the parental Physician Resources scale, the inter-item Spearman matrix showed non-uniform cohesion (ρ range = 0.23–0.73), and the unrotated solution yielded two components with $\lambda > 1$ ($\lambda_1 = 3.562$, $\lambda_2 = 1.199$), together accounting for 68.02% of the variance. Because the second component showed a mixed-sign pattern consistent with method variance rather than a substantively interpretable sub-dimension, and because the seven items formed a reliable composite ($\alpha = 0.830$), all seven items were retained as a single unweighted sum. Full PCA outputs are reported in Table S5A–D. The assumption of normality was checked for all continuous variables using the Shapiro–Wilk test, and since the normal distribution was rejected, non-parametric methods were applied. To compare differences between two independent groups, the Mann–Whitney U test was performed. For all Mann–Whitney U comparisons the effect size was calculated as $r = |Z|/\sqrt{N}$ and is reported alongside the test statistic; confidence intervals for r are not reported because r is derived directly from the test statistic rather than estimated independently.

Spearman's rank correlation coefficient was calculated to determine associations between selected variables. For the cross-perspective comparison of categorical frequencies of routine clinical strategy use between physicians and parents, chi-square tests with odds ratios were applied; all tests used a two-tailed significance threshold of $p < 0.05$.

3. Results

The demographic profile of both physician and parent samples is presented in Table 1. A total of 166 physicians participated in the study, including 99 pediatricians (59.6%) and 67 general practitioners (40.4%). The majority of respondents were female (142, 85.5%). The

median age of the participants was 35 years (range: 28–69). Regarding professional status, 97 participants (58.4%) were fully certified specialists, while 69 (41.6%) were physicians in training (residents). Primary healthcare clinics constituted the main workplace for 106 physicians (63.9%). Additionally, a positive family history of ASD was declared by 36 participants (21.7%).

Table 1. Characteristics of parent and physician samples.

Physician Sample		**Parent Sample**	
Variable	*N* (%)	Variable	*N* (%)
Gender		Parent's gender	
Male	24 (14.5%)	Male	12 (6.8%)
Female	142 (85.5%)	Female	165 (93.2%)
Physician age—med. (range)	35 (28–69)	Parent age—median (range)	39 (26–60)
Type of settlement		Type of settlement	
Rural area	20 (12%)	Rural area	55 (31.1%)
Small town (up to 20,000 inhabitants)	24 (14.5%)	Small town (up to 20,000 inhabitants)	39 (22%)
Medium town (20,000–100,000 inhabitants)	32 (19.3%)	Medium town (20,000–100,000 inhabitants)	33 (18.6%)
City (more than 100,000 inhabitants)	90 (54.2%)	City (more than 100,000 inhabitants)	50 (28.3%)
Medical specialty		Child's gender	
Pediatrician	99 (59.6%)	Male	146 (82.5%)
General Practitioner	67 (40.4%)	Female	31 (17.5%)
Professional status		Child age—med. (range)	7 (2–19)
Specialist	97 (58.4%)	Subtype of ASD diagnosis (ICD-10)	
Physician in training	69 (41.6%)	Childhood autism	92 (52%)
Experience in primary healthcare		Atypical autism	21 (11.9%)
Up to 5 years	74 (44.6%)	Asperger Syndrome	51 (28.8%)
Between 5 and 10 years	42 (25.3%)	Pervasive developmental disorder, unspecified	13 (7.3%)
Between 10 and 15 years	8 (4.8%)		
More than 15 years	42 (25.3%)	Comorbid ADHD	
Primary healthcare as main workplace		Yes	27 (15.3%)
Yes	106 (63.9%)	No	150 (84.7%)
No	60 (36.1%)	Comorbid intellectual disability	
Positive ASD family history		Yes	38 (21.5%)
Yes	36 (21.7%)	No	139 (78.5%)
No	130 (78.3%)	Primary care physician's specialty	
		Pediatrician	127 (71.8%)
		General Practitioner	50 (28.2%)

A total of 177 parents or legal guardians completed the questionnaire, the vast majority of whom were female (n = 165, 93.2%). The median age of the parents was 39 years (range: 26–60). The median age of the children was 7 years (range: 2–19). Regarding the clinical profile, the sample of children represented various subtypes of ASD diagnoses according to ICD-10, alongside comorbidities such as attention-deficit/hyperactivity disorder (ADHD) and intellectual disability. The primary healthcare services for the participants' children

were provided predominantly by pediatricians ($n = 127$, 71.8%), followed by general practitioners ($n = 50$, 28.2%).

To assess the overall clinical profile from the physicians' perspective, three categories were identified. Individual items measuring self-efficacy and the implementation of clinical strategies were aggregated into composite scores. The third category evaluated physicians' subjective perception of situational anxiety, operationalized through a single-item global rating. Subsequently, associations between chosen variables and differences between subgroups were analyzed (Table 2).

Table 2. Correlation between chosen variables from the physician perspective ($N = 166$).

Variables	Physician Anxiety	Perceived Self-Efficacy	Clinical Strategies
Physician anxiety	-		
Perceived self-efficacy	$\varrho = -0.24$, ** $p = 0.002$	-	
Clinical strategies	$\varrho = 0.07$, $p = 0.36$	$\varrho = 0.41$ *** $p < 0.001$	-

** $p < 0.01$, *** $p < 0.001$.

The analysis revealed a significant negative correlation between the level of anxiety and self-efficacy ($\varrho = -0.24$, $p = 0.002$) and positive correlation between the level of perceived self-efficacy and the more frequent use of clinical strategies ($\varrho = 0.41$, $p < 0.001$).

To identify potential determinants of clinicians' approaches to patients on the autism spectrum, group comparisons were conducted across three mentioned domains. The Mann–Whitney U test revealed that medical specialty significantly differentiated physicians' clinical profiles. While no significant difference was observed in baseline anxiety levels between pediatricians and general practitioners ($Z = -0.21$, $p = 0.83$), a significant difference emerged regarding perceived self-efficacy ($Z = 2.34$, $p = 0.02$) with pediatricians demonstrating a higher overall rank distribution of self-efficacy than general practitioners. Furthermore, a significant difference was found in the utilization of clinical strategies ($Z = 3.81$, $p < 0.001$), with pediatricians reporting a significantly higher frequency of implementing specific accommodations. In contrast, specialty status did not significantly differentiate scores in any of the examined domains. Regarding demographic and workplace characteristics, gender was found to significantly influence perceived self-efficacy, with female physicians reporting higher overall efficacy ranks than male clinicians. Additionally, physicians whose main workplace was outside of primary healthcare settings reported a significantly greater frequency of utilizing clinical accommodations than those working predominantly within primary care ($Z = 3.06$, $p = 0.002$). A positive family history of ASD was significantly associated with both enhanced perceived self-efficacy ($Z = 2.4$, $p = 0.02$) and a higher frequency of implementing specialized clinical communication strategies during patient encounters ($Z = 2.08$, $p = 0.04$).

Continuous and categorical analyses demonstrated that physicians' chronological age, total length of professional practice (years of experience), and the geographical location or population size of the medical facility yielded no statistically significant associations or differences across any of the three clinical perspectives in this sample. Subgroup analysis of physicians' situational anxiety, perceived self-efficacy, and clinical strategies is presented in Table 3.

Table 3. Subgroup analysis of physicians' situational anxiety, perceived self-efficacy, and clinical strategies ($N = 166$).

Subgroup (N)	Anxiety Median (Range)	Self-Efficacy Median (Range)	Clinical Strategies Median (Range)
Specialty			
Pediatricians (99)	2 (1–3)	8 (4–12)	7 (3–10)
General Practitioners (67)	2 (1–4)	8 (4–13)	6 (3–12)
Z-score (r)	−0.21 (0.02)	2.34 (0.18)	3.81 (0.30)
p-value	0.83	* 0.02	*** <0.001
Specialty status			
Specialists (97)	2 (1–4)	8 (4–13)	6 (3–12)
Physicians in training (69)	2 (1–3)	8 (4–12)	6 (3–10)
Z-score (r)	−0.06 (0.01)	−0.20 (0.02)	−0.96 (0.07)
p-value	0.95	0.83	0.34
Gender			
Male (24)	2 (1–3)	7 (4–10)	7 (3–12)
Female (142)	2 (1–4)	8 (4–13)	6 (3–10)
Z-score (r)	0.84 (0.07)	2.39 (0.19)	1.17 (0.09)
p-value	0.40	* 0.02	0.24
Primary healthcare as main workplace			
Yes (106)	2 (1–3)	8 (4–12)	6 (3–12)
No (60)	2 (1–4)	8 (4–13)	7 (3–10)
Z-score (r)	−1.68 (0.13)	−0.96 (0.07)	3.06 (0.24)
p-value	0.09	0.34	** 0.002
Positive ASD family history			
Yes (36)	2 (1–4)	8 (4–13)	7 (3–12)
No (130)	2 (1–4)	8 (4–12)	6 (3–10)
Z-score (r)	−0.72 (0.06)	2.40 (0.19)	2.08 (0.16)
p-value	0.47	* 0.02	* 0.04

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

To examine how parental evaluations of healthcare encounters are shaped by logistics, medical specialties, and the child's clinical presentation, three core domains were identified. Perceived physician anxiety was operationalized as a single-item assessment capturing the parents' subjective observation of the clinician's situational distress. Individual items measuring perceived physician resources and perceived organizational barriers were aggregated into composite scores.

Parents whose children had co-occurring intellectual disability perceived significantly higher levels of consulting physician's anxiety ($Me = 2$, range: 1–4) compared to parents of children without intellectual disability ($Me = 1$, range: 1–4) ($Z = 2.01$, $p = 0.04$). In contrast, the presence of comorbid intellectual disability did not significantly alter parental assessments of the physicians' available professional resources ($p = 0.67$) or the severity of perceived organizational barriers ($p = 0.72$). Similarly, a comorbid diagnosis of ADHD did not yield any significant differences in perceived physician anxiety ($p = 0.15$), resources ($p = 0.19$), or structural constraints ($p = 0.26$).

Furthermore, the specific clinical subtype of the autism spectrum diagnosis (Childhood Autism vs. Other ICD-10 Diagnostic Variants) did not significantly differentiate parental reports across any of the evaluated outcome measures: perceived anxiety ($p = 0.49$), professional resources ($p = 0.85$), or barriers ($p = 0.55$).

No statistically significant differences were detected for logistical and professional characteristics in parental evaluations. The primary specialty of the healthcare practitioner visited (Pediatrician vs. General Practitioner) did not significantly differentiate parents' perspectives on perceived anxiety ($p = 0.25$), resources ($p = 0.69$), or organizational barriers ($p = 0.63$). Finally, the geographical setting and population size of the medical facility (towns with up to 100,000 inhabitants vs. cities with more than 100,000 inhabitants) showed no statistically significant relationships across the three parental dimensions (all $p > 0.05$). Comparison of perceived physician factors and organizational barriers in parental subgroup analysis is presented in Table 4.

Table 4. Comparison of perceived physician factors and organizational barriers in parental subgroup analysis ($N = 177$).

Subgroup (N)	Perceived Physician Anxiety Median (Range)	Perceived Physician Resources Median (Range)	Perceived Barriers Median (Range)
Primary care physicians' specialty			
Pediatricians (127)	1 (1–4)	12 (7–27)	9 (3–12)
General Practitioners (50)	1 (1–4)	12 (8–27)	8 (3–12)
Z-score (r)	−1.16 (0.09)	−0.40 (0.03)	0.48 (0.04)
p-value	0.25	0.69	0.63
Type of settlement			
Town (up to 100,000 inhabitants) (127)	1 (1–4)	12 (7–27)	8 (3–12)
City (more than 100,000 inhabitants) (50)	1 (1–4)	14 (8–22)	9 (3–12)
Z-score (r)	−0.48 (0.04)	−1.29 (0.10)	1.10 (0.08)
p-value	0.63	0.20	0.27
Subtype of ASD diagnosis (ICD-10)			
Childhood autism (92)	1 (1–4)	12 (8–24)	8 (3–12)
Other ICD-10 diagnosis (85)	1 (1–4)	12 (7–27)	9 (3–12)
Z-score (r)	−0.69 (0.05)	−0.18 (0.01)	0.59 (0.04)
p-value	0.49	0.85	0.55
Comorbid ADHD			
Yes (27)	1 (1–3)	11 (8–20)	9 (3–12)
No (150)	1 (1–4)	12 (7–27)	8 (3–12)
Z-score (r)	−1.40 (0.11)	−1.30 (0.10)	1.10 (0.08)
p-value	0.15	0.19	0.26
Comorbid intellectual disability			
Yes (38)	2 (1–4)	12 (8–24)	8 (3–12)
No (139)	1 (1–4)	12 (7–27)	9 (3–12)
Z-score (r)	2.01 (0.15)	−0.42 (0.03)	0.36 (0.03)
p-value	* 0.04	0.67	0.72

* $p < 0.05$.

To explore the interconnectedness of these parental evaluations, a Spearman rank correlation matrix was calculated (Table 5). Perceived physician anxiety was significantly and negatively correlated with perceived physician resources ($\varrho = -0.21$, $p = 0.004$) and positively correlated with organizational barriers ($\varrho = 0.18$, $p = 0.02$). Furthermore, a moderate, negative correlation was observed between perceived physician resources and organizational barriers ($\varrho = -0.41$, $p < 0.001$).

Table 5. Spearman Rank Correlation Matrix for Perceived Physician Anxiety, Perceived Resources, and Perceived Organizational Barriers in Parental Perspective.

Variables	Perceived Physician's Anxiety	Perceived Physician's Resources	Perceived Organizational Barriers
Perceived physician anxiety	-		
Perceived physician resources	$\varrho = -0.21$, ** $p = 0.004$	-	
Perceived organizational barriers	$\varrho = 0.18$, * $p = 0.02$	$\varrho = -0.41$ *** $p < 0.001$	-

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

In addition to evaluating general systemic barriers, parents were asked to report the frequency with which specific structural and scheduling accommodations were implemented during their child's medical visits (Figure 1). Among the surveyed strategies, ensuring provider continuity (seeing the same attending physician) was the most frequently experienced accommodation, with the majority of parents (74.0%, $n = 131$) reporting that this occurred routinely ('Often' or 'Always'). In contrast, proactive logistical scheduling was substantially less common. Scheduled timing (appointments at a fixed, predetermined time to minimize waiting) was experienced routinely by less than half of the sample (42.4%, $n = 75$), Finally, first-slot scheduling (arranging appointments at the very beginning of the day or queue to avoid crowded waiting rooms) was the least utilized strategy; only a small fraction of parents (12.4%, $n = 22$) experienced this accommodation routinely.

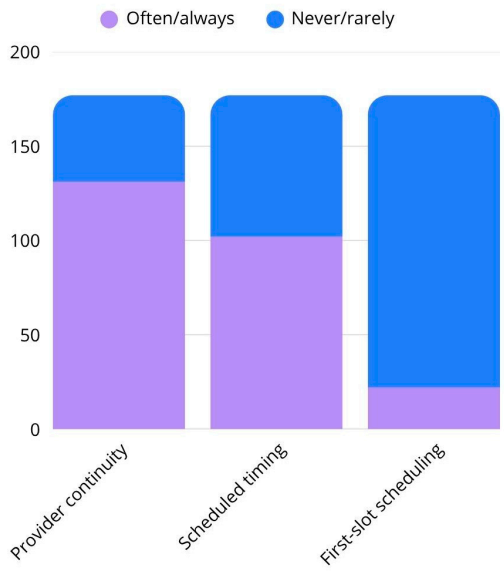


Figure 1. Parents' reports on the frequency of structural and scheduling accommodations during healthcare encounters ($n = 177$). Bars show the proportion of parents answering 'Often' or 'Always' versus 'Never' or 'Rarely': provider continuity 74.0% (131/177) vs. 26.0% (46/177); scheduled timing 42.4% (75/177) vs. 57.6% (102/177); first-slot scheduling 12.4% (22/177) vs. 87.6% (155/177).

In order to compare perspectives between both analyzed groups, four item pairs were examined: three pairs of frequency items on clinical strategies (physician-reported frequency of delivery versus parental-reported frequency of receipt) and one pair that is not directly equivalent (physician confidence in adapting the clinical visit environment versus parental report of the frequency of sensory adjustments). To conduct the chi-square tests, 'Always' and 'Often' answers were aggregated.

As visualized in Figure 2, physicians reported higher rates of routine strategy delivery than parents reported receiving in all four comparisons, of which three are directly comparable frequency items on clinical strategy use and the fourth is not directly equivalent: the routine discussion of social difficulties (42.2% [70/166] vs. 18.6% [33/177]; $\chi^2 = 22.56$, $p < 0.001$; $OR = 3.18$, 95% CI 1.95–5.18), the tailored addressing of family-centered needs (25.3% [42/166] vs. 7.9% [14/177]; $\chi^2 = 18.97$, $p < 0.001$; $OR = 3.94$, 95% CI 2.06–7.54), the systematic tracking of ongoing external therapies (37.3% [62/166] vs. 18.1% [32/177]; $\chi^2 = 15.99$, $p < 0.001$; $OR = 2.70$, 95% CI 1.65–4.43), and sensory accommodations in the medical setting (27.7% [46/166] vs. 13.6% [24/177]; $\chi^2 = 10.56$, $p = 0.001$; $OR = 2.44$, 95% CI 1.41–4.23). All χ^2 values are uncorrected for continuity; Yates-corrected values (21.46, 17.71, 15.04 and 9.71) yielded the same conclusions.

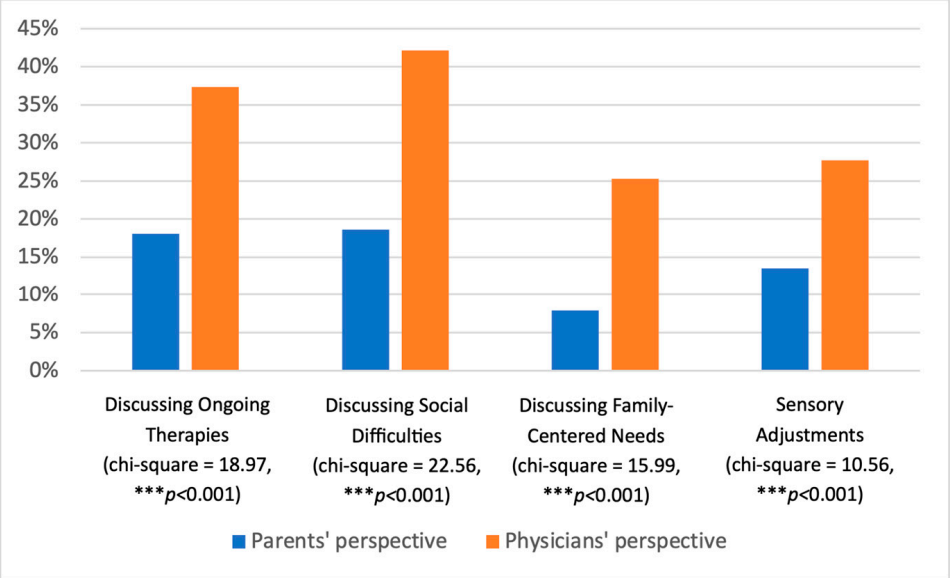


Figure 2. Comparison of the cumulative frequency of 'Often' and 'Always' answers for selected clinical strategies from the physicians' ($n = 166$) and parents' ($n = 177$) perspectives. Percentages are displayed above the bars for each group: routine discussion of social difficulties, physicians 42.2% (70/166) vs. parents 18.6% (33/177), $\chi^2 = 22.56$, OR = 3.18, 95% CI 1.95–5.18, *** $p < 0.001$; tailored addressing of family-centered needs, 25.3% (42/166) vs. 7.9% (14/177), $\chi^2 = 18.97$, $OR = 3.94$, 95% CI 2.06–7.54, *** $p < 0.001$; systematic tracking of ongoing external therapies, 37.3% (62/166) vs. 18.1% (32/177), $\chi^2 = 15.99$, $OR = 2.70$, 95% CI 1.65–4.43, *** $p < 0.001$; sensory accommodations in the medical setting, 27.7% (46/166) vs. 13.6% (24/177), $\chi^2 = 10.56$, $OR = 2.44$, 95% CI 1.41–4.23. All χ^2 values are uncorrected for continuity.

Finally, a Mann–Whitney U test was used to compare physicians' self-reported anxiety during autism-related consultations with parents' ratings of how often the physician appeared anxious. The two groups differed significantly ($U = 8545.0$, $Z = -7.49$, $p < 0.001$). Physicians reported a higher level of situational anxiety during these encounters ($Me = 2.0$, $Q1–Q3 = 2.0–2.0$) than parents reported observing in the attending physician ($Me = 1.0$, $Q1–Q3 = 1.0–2.0$). Because the samples were independent and the two items were not equivalent, this difference reflects divergent distributions of the two groups' reports.

4. Discussion

The current study investigated self-efficacy and the utilization of clinical strategies among primary care physicians within the context of caring for pediatric patients with ASD with attention to differences between physicians' and parents' group-level reports of clinical strategies and anxiety. Our findings revealed that higher self-efficacy was associated with lower levels of anxiety experienced by clinicians during consultations. This finding aligns with prior research demonstrating that low self-efficacy among healthcare providers is frequently linked to occupational burnout and heightened emotional distress [22–24]. Furthermore, our data indicate that higher self-efficacy was associated with more frequent use of clinical strategies, which ultimately supports a higher quality of care in primary medicine [25,26]. Pediatricians, physicians whose main workplace was outside of primary healthcare settings, and those with positive ASD family history reported significantly higher frequency of implementing specific strategies. Specialty, gender and a positive family history of ASD were each significantly associated with self-efficacy, whereas specialty status, physician age and geographic location showed no significant association; the study was not powered to detect small effects.

Furthermore, our study sheds light on the structural reality of primary care through the lens of caregiving families. The descriptive analysis of parental responses showed that reported structural accommodations were uneven: provider continuity was the most frequently reported accommodation (74.0%), whereas scheduled timing (42.4%) and priority first-slot scheduling (12.4%) were reported less often. For families raising children with ASD, these organizational barriers transcend minor administrative inconveniences; they were reported alongside sensory overload and behavioral distress in pediatric patients. The findings correlate with other studies in the field [27–29]. Crucially, the overall level of perceived organizational barriers was positively correlated with perceived physician anxiety and negatively correlated with perceived physician resources, consistent with a weak association between reported organizational barriers and perceived physician anxiety in these reports ($\varrho = 0.18$, $p = 0.02$). The construct of physician anxiety was evaluated from both perspectives. The level of self-reported clinician anxiety remained stable across all investigated variables, indicating that the self-reported anxiety did not differ significantly across the physician characteristics examined, although the study was not powered to detect small subgroup differences.

Conversely, parental reports showed a significant but modest association between comorbid intellectual disability and perceived physician anxiety ($Z = 2.01$, $p = 0.04$), based on a single unadjusted comparison; no other variable examined showed a significant association, and the study was not powered to detect small effects. This finding aligns closely with the existing literature [30,31].

Interestingly, the research revealed the statistically significant difference between self-reported clinician anxiety and the level of anxiety perceived by parents. Physicians reported higher situational anxiety than parents attributed to them. Because the two samples were independent and the two items were not equivalent (physicians rated how often they feel anxious; parents rated how often the physician appears anxious), this finding indicates divergent distributions of the two groups' reports rather than documented concealment of anxiety within the same consultation. One possible interpretation, consistent with the emotional-labour literature, is that clinicians manage the visible expression of anxiety during consultations; this remains a hypothesis, as no measure of expressive suppression or concealment was collected [32–34].

Beyond individual attributes and organizational resources, the most critical finding of this study lies in the pervasive divergence between physicians' and parents' perspectives regarding the implementation of clinical strategies. Across all investigated domains,

medical practitioners reported significantly higher rates of routine strategy execution than parents reported receiving (three directly comparable comparisons, independent samples, $p < 0.001$; the non-equivalent sensory comparison, $p = 0.001$). The largest absolute difference concerned the routine discussion of social difficulties, whereas the largest relative difference concerned family-centered needs. The two samples reported different distributions of routine strategy delivery and receipt; because the groups were independent and not linked, the data cannot establish whether an intervention reported by a physician was delivered to, noticed by, or remembered by a particular parent. This finding aligns with the broader literature on medical communication in developmental care, which emphasizes that structured clinical behaviors often fail to translate into perceived support unless they are explicitly, repeatedly, and collaboratively communicated to the patient's primary support ecosystem [35–37].

Together with two earlier reports from the same research project, the present study forms the third component of a triangulated account of primary care for ASD in Poland. The first prior report quantified factual knowledge of ASD among the same 166 primary care physicians—etiologies (37.95% correct), diagnostic criteria (42.69%), and patient support (70.05%) [21]. The second prior report addressed comprehensive care as experienced by parents of children with ASD [14]. The present study shifts the lens to physician self-efficacy, clinical strategies, situational anxiety, and organizational barriers—what physicians report doing in the consultation room and how those reports align with parents' perceptions. Because the three reports draw on partly overlapping subsets of items from a single, jointly designed data collection—the parental items on physician resources and organizational barriers having been reported previously and re-used here as composites—the three publications together offer a more complete view of primary care for ASD in Poland than any single publication could, while sharing a common sampling frame and a common set of demographic variables.

5. Conclusions

In conclusion, this study documents a substantial divergence between the reports of two independent, non-linked groups: primary care physicians and parents of children with ASD. Because no physician–parent dyads were formed and the two questionnaires did not refer to the same consultations, these findings describe differences between group-level reports rather than disagreement within individual visits.

Physicians reported a higher level of situational anxiety during autism-related consultations than parents attributed to the attending physician. This pattern is consistent with the possibility that clinicians manage the visible expression of anxiety in front of families, but no measure of expressive suppression or concealment was collected; it therefore remains an untested hypothesis rather than an observed finding. In parallel, physicians' reports of routine strategy delivery consistently exceeded parents' reports of receiving them across all three directly comparable domains examined, with the non-equivalent sensory comparison also differing, and parents' reports of structural accommodations were uneven, with provider continuity reported most frequently and priority first-slot scheduling least frequently.

Consequently, optimizing primary care for the autism community is unlikely to be achieved by enhancing individual physician self-efficacy alone. The findings point instead toward systemic reforms, standardized communication checklists, and institutionalized structural accommodations tailored to the logistical realities of neurodivergent pediatric patients—directions that follow from the observed pattern but were not tested in the present cross-sectional, self-report design and require evaluation in future work using matched physician–parent dyads.

6. Limitations

Several limitations should be considered when interpreting the findings of this study. The physician and parent samples were independent and not matched at the level of individual consultations; the study therefore compares group-level reports and cannot establish within-consultation disagreement or identify whether a particular physician overestimated what a particular family received. This is a primary limitation of the design. The two samples also differed in composition and setting: pediatricians represented 59.6% of the physician sample but 71.8% of the physicians described by parents, and 12.0% of physicians versus 31.1% of parents were based in a rural setting. Because pediatricians reported significantly more frequent use of clinical strategies than general practitioners, this specialty imbalance is itself associated with the outcome compared across samples and is therefore a potential contributor to the observed physician–parent difference, rather than a minor demographic difference. Because both surveys were distributed online through professional networks and social media, a participation rate could not be calculated, and the samples are likely subject to self-selection; the extent of this bias cannot be quantified. In addition, 36.1% of physicians reported that primary healthcare was not their main workplace, and these physicians reported significantly more frequent use of clinical strategies than those working predominantly in primary care ($Z = 3.06$, $p = 0.002$); the physician results may therefore not fully represent routine Polish primary care. The analyses were exploratory and involved multiple comparisons without adjustment for multiplicity, and the study was not powered to detect small subgroup differences; non-significant findings should therefore not be interpreted as evidence of absence. The cross-sectional design precludes drawing definitive causal inferences regarding the directionality of the links between physician self-efficacy, situational anxiety, and parental experiences. Second, data collection relied on online self-reported questionnaires developed specifically for this study. While the composite scales measuring physician self-efficacy, clinical strategies, and parental perceived physician resources demonstrated strong internal consistency ($\alpha = 0.807$–0.873), the parental organizational barriers scale fell below the conventional $\alpha \geq 0.70$ benchmark ($\alpha = 0.613$). For the organizational barriers scale, $\alpha = 0.613$ should not be interpreted as evidence of a reliable measurement instrument but rather as a preliminary indication that the three queried logistical accommodations cohere weakly as a single composite in this sample. The parental Physician Resources scale warrants particular caution: unrotated PCA identified two components with eigenvalues above 1 ($\lambda_1 = 3.562$, $\lambda_2 = 1.199$), together accounting for 68.02% of the variance. The second component showed a mixed-sign pattern that may reflect method variance, but a substantive interpretation cannot be excluded; because the seven items nevertheless formed a composite with acceptable internal consistency ($\alpha = 0.830$), they were retained as a single unweighted sum for descriptive and exploratory purposes, and the potential multidimensionality of this score is acknowledged as a limitation. The seven items were retained as a single unweighted sum as a pragmatic decision, and the potential multidimensionality of this score is an acknowledged limitation. Accordingly, these study-developed instruments require confirmatory factor analysis and test–retest reliability assessment before deployment as comparative metrics across studies. Finally, because the physician protocol did not include a parallel composite of administrative constraints, the characterization of organizational barriers remains strictly one-sided from the parental perspective, preventing a direct between-group statistical comparison of infrastructural burdens. The child's ASD diagnosis, comorbid ADHD and comorbid intellectual disability were reported by parents and were not independently verified against medical documentation; the subgroup analyses that use these variables therefore rest on parent-reported classifications.

Supplementary Materials: The following supporting information can be downloaded at https://www.mdpi.com/article/10.3390/children13111505/s1: Additional File S1: Table S1: Scoring specification of the study-developed composites and single-item measures. Table S2: Spearman rank-order correlation coefficient for all subscales. Table S3: Item-level reliability statistics for all subscales. Table S4: Inter-scale Pearson correlations among composite scale scores, presented separately by respondent group. Table S5: Principal component analysis of all four study scales. Table S6: Item-level mapping of physician and parent items across the compared constructs, with verbatim wording and response options. Table S7: Composition, scoring and internal consistency of the composite variables used in the analyses. Table S8: Mapping of the items analysed in the present study against their publication status in two earlier reports from the same data collection; Additional File S2: Primary healthcare Physicians in ASD parents' view; Additional File S3: Primary Care Physicians' Perspectives on Autism Spectrum Disorders (ASD).

Author Contributions: P.D.: Conceptualization, methodology, formal analysis, investigation, data curation, visualization, writing—original draft. K.P.-N.: Conceptualization, investigation, data curation, writing–reviewing and editing. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: This study was submitted to and approved by the Independent Bioethics Committee for Scientific Research at the Medical University of Gdansk, Poland (approval reference number: KB 511/2023), approved on 4 October 2023. All methods and procedures involving human participants were conducted in accordance with the relevant guidelines, national regulations, and the ethical standards of the Declaration of Helsinki.

Informed Consent Statement: Informed consent was obtained from all individual participants included in the study (both primary care physicians and parents/legal guardians of the pediatric patients). Informed consent was obtained electronically at the beginning of the web-based questionnaire; explicit agreement to the study terms was required from each participant prior to gaining access to the survey items.

Data Availability Statement: Anonymized datasets relevant to the analyses may be made available by the corresponding author upon reasonable request. The data are not publicly available due to ethical restrictions.

Acknowledgments: The authors of the project would like to thank all participants of the research for their involvement.

Conflicts of Interest: The authors declare no competing interests.

Abbreviations

The following abbreviations are used in this manuscript:

ASD	Autism Spectrum Disorder
ADHD	Attention-Deficit/Hyperactivity Disorder
ICD-10	International Classification of Diseases, 10th Revision
DSM-5	Diagnostic and Statistical Manual of Mental Disorders, 5th Edition
PCPs	Primary Care Physicians
GPs	General Practitioners

References

1. Maenner, M.J.; Rice, C.E.; Arneson, C.L.; Cunniff, C.; Schieve, L.A.; Carpenter, L.A.; Braun, K.V.N.; Kirby, R.S.; Bakian, A.V.; Durkin, M.S. Potential Impact of *DSM-5* Criteria on Autism Spectrum Disorder Prevalence Estimates. *JAMA Psychiatry* **2014**, *71*, 292. [CrossRef]
2. Sacco, R.; Camilleri, N.; Eberhardt, J.; Umla-Runge, K.; Newbury-Birch, D. The Prevalence of Autism Spectrum Disorder in Europe. In *Autism Spectrum Disorders—Recent Advances and New Perspectives*; IntechOpen: London, UK, 2023. [CrossRef]

3. Jensen de López, K.; Thirup Møller, H. Prevalence of Autism in Scandinavian Countries (Denmark, Norway, Sweden), and Nordic Countries (Finland, Iceland, the Faroe Islands, and Greenland). *Neuropsychiatr. Dis. Treat.* **2024**, *20*, 1597–1612. [CrossRef]
4. Barbaro, J.; Dissanayake, C. Autism Spectrum Disorders in Infancy and Toddlerhood: A Review of the Evidence on Early Signs, Early Identification Tools, and Early Diagnosis. *J. Dev. Behav. Pediatr.* **2009**, *30*, 447–459. [CrossRef]
5. Guthrie, W.; Swineford, L.B.; Nottke, C.; Wetherby, A.M. Early diagnosis of autism spectrum disorder: Stability and change in clinical diagnosis and symptom presentation. *J. Child Psychol. Psychiatry* **2013**, *54*, 582–590. [CrossRef]
6. van 't Hof, M.; Tisseur, C.; van Berckelear-Onnes, I.; van Nieuwenhuyzen, A.; Daniels, A.M.; Deen, M.; Hoek, H.W.; Ester, W.A. Age at autism spectrum disorder diagnosis: A systematic review and meta-analysis from 2012 to 2019. *Autism* **2021**, *25*, 862–873. [CrossRef] [PubMed]
7. Maksimović, S.; Marisavljević, M.; Stanojević, N.; Ćirović, M.; Punišić, S.; Adamović, T.; Đorđević, J.; Krgović, I.; Subotić, M. Importance of Early Intervention in Reducing Autistic Symptoms and Speech–Language Deficits in Children with Autism Spectrum Disorder. *Children* **2023**, *10*, 122. [CrossRef]
8. Bonis, S. Stress and Parents of Children with Autism: A Review of Literature. *Issues Ment. Health Nurs.* **2016**, *37*, 153–163. [CrossRef]
9. Valicenti-McDermott, M.; Lawson, K.; Hottinger, K.; Seijo, R.; Schechtman, M.; Shulman, L.; Shinnar, S. Parental Stress in Families of Children with Autism and Other Developmental Disabilities. *J. Child Neurol.* **2015**, *30*, 1728–1735. [CrossRef]
10. Mazurek, M.O.; Brown, R.; Curran, A.; Sohl, K. ECHO Autism. *Clin. Pediatr.* **2017**, *56*, 247–256. [CrossRef]
11. Corden, K.; Brewer, R.; Cage, E. A Systematic Review of Healthcare Professionals' Knowledge, Self-Efficacy and Attitudes Towards Working with Autistic People. *Rev. J. Autism Dev. Disord.* **2022**, *9*, 386–399. [CrossRef]
12. Wieckowski, A.T.; Zuckerman, K.E.; Broder-Fingert, S.; Robins, D.L. Addressing current barriers to autism diagnoses through a tiered diagnostic approach involving pediatric primary care providers. *Autism Res.* **2022**, *15*, 2216–2222. [CrossRef]
13. Johnson, M.; Doherty, M.; Shaw, S.C. Overcoming barriers to autistic health care: Towards autism-friendly practices. *Br. J. General. Pract.* **2022**, *72*, 255–256. [CrossRef]
14. Domarecki, P.; Plata-Nazar, K. The Assessment of Comprehensive Care for Autistic Children Provided by Polish Primary Healthcare Physicians in Parental View. *Glob. Pediatr. Health* **2024**, *11*, 1–12. [CrossRef]
15. Ault, S.; Breitenstein, S.M.; Tucker, S.; Havercamp, S.M.; Ford, J.L. Caregivers of Children with Autism Spectrum Disorder in Rural Areas: A Literature Review of Mental Health and Social Support. *J. Pediatr. Nurs.* **2021**, *61*, 229–239. [CrossRef]
16. Myers, L.; Karp, S.M.; Dietrich, M.S.; Looman, W.S.; Lutenbacher, M. Family-Centered Care: How Close Do We Get When Talking to Parents of Children Undergoing Diagnosis for Autism Spectrum Disorders? *J. Autism Dev. Disord.* **2021**, *51*, 3073–3084. [CrossRef]
17. Al-Mazidi, S.H.; Al-Ayadhi, L.Y. National Profile of Caregivers' Perspectives on Autism Spectrum Disorder Screening and Care in Primary Health Care: The Need for Autism Medical Home. *Int. J. Environ. Res. Public Health* **2021**, *18*, 13043. [CrossRef]
18. Brookman-Frazee, L.; Stadnick, N.; Chlebowski, C.; Baker-Ericzén, M.; Ganger, W. Characterizing psychiatric comorbidity in children with autism spectrum disorder receiving publicly funded mental health services. *Autism* **2018**, *22*, 938–952. [CrossRef]
19. Penner, M.; Senman, L.; Andoni, L.; Dupuis, A.; Anagnostou, E.; Kao, S.; Solish, A.; Shouldice, M.; Ferguson, G.; Brian, J. Concordance of Diagnosis of Autism Spectrum Disorder Made by Pediatricians vs a Multidisciplinary Specialist Team. *JAMA Netw. Open* **2023**, *6*, e2252879. [CrossRef]
20. Fyfe, C.; Winell, H.; Dougherty, J.; Gutmann, D.H.; Kolevzon, A.; Marrus, N.; Tedroff, K.; Turner, T.N.; A Weiss, L.; Yip, B.H.K.; et al. Time trends in the male to female ratio for autism incidence: Population based, prospectively collected, birth cohort study. *BMJ* **2026**, *392*, e084164. [CrossRef]
21. Domarecki, P.; Plata-Nazar, K.; Sohl, K. An Assessment of the Knowledge of Autism Spectrum Disorder Among Polish Primary Care Physicians. *Medicina* **2025**, *61*, 761. [CrossRef]
22. Sulca Quispe, R.E.; Moncada, D.V.; Francia, F.T.J. Relationship Between Self-Efficacy and Burnout Syndrome in Resident Physicians in Metropolitan Lima. *Int. J. Environ. Res. Public Health* **2026**, *23*, 679. [CrossRef]
23. Du, Y.; Qiao, L.; Dong, L.; Wan, C.; Yang, X.; Liu, H. The relationship between self-efficacy, resilience, and job burnout in pediatric residents: A cross-sectional study in Western China. *BMC Med. Educ.* **2024**, *24*, 787. [CrossRef]
24. Al-Huseini, S.; Al Alawi, M.; Al-Balushi, N.; Al Sinawi, H.; Mirza, H.; Al Balushi, R.; Al Balushi, M.; Jose, S.; Cucchi, A.; Al-Sibani, N.; et al. Prevalence and predictors of occupational burnout among first-year medical residents in Oman: The role of trait emotional intelligence. *BJPsych Int.* **2025**, *22*, 43–51. [CrossRef]
25. Landu, Z.K.; Crowley, T. Primary health care nurses' knowledge, self-efficacy and performance of diabetes self-management support. *Afr. J. Prim. Health Care Fam. Med.* **2023**, *15*, a3713. [CrossRef]
26. Shahnazi, H.; Araban, M.; Karimy, M.; Basiri, M.; Ghazvini, A.; Stein, L. A quasi-experimental study to improve health service quality: Implementing communication and self-efficacy skills training to primary healthcare workers in two counties in Iran. *BMC Med. Educ.* **2021**, *21*, 369. [CrossRef]
27. Walsh, C.; Lydon, S.; O'Dowd, E.; O'Connor, P. Barriers to Healthcare for Persons with Autism: A Systematic Review of the Literature and Development of a Taxonomy. *Dev. Neurorehabilit.* **2020**, *23*, 413–430. [CrossRef]

28. Mason, D.; Ingham, B.; Urbanowicz, A.; Michael, C.; Birtles, H.; Woodbury-Smith, M.; Brown, T.; James, I.; Scarlett, C.; Nicolaidis, C.; et al. A Systematic Review of What Barriers and Facilitators Prevent and Enable Physical Healthcare Services Access for Autistic Adults. *J. Autism Dev. Disord.* **2019**, *49*, 3387–3400. [CrossRef]
29. Doherty, A.J.; Atherton, H.; Boland, P.; Hastings, R.; Hives, L.; Hood, K.; James-Jenkinson, L.; Leavey, R.; Randell, E.; Reed, J.; et al. Barriers and facilitators to primary health care for people with intellectual disabilities and/or autism: An integrative review. *BJGP Open* **2020**, *4*, bjgpopen20X101030. [CrossRef]
30. Patel, H.; Shrimali, A.L.; McDougle, C.J.; Carroll, H.M. Acute Medical Events in Adults with Profound Autism: A Review and Illustrative Case Series. *Brain Sci.* **2025**, *15*, 740. [CrossRef]
31. Franklin, C.; Green, S.; Brooker, K.; de Greef, R.; Meurk, C.; Heffernan, E. Health professional education in autism and intellectual disability: Systematic review. *BJPsych Open* **2025**, *11*, e238. [CrossRef]
32. Larson, E.B. Clinical Empathy as Emotional Labor in the Patient-Physician Relationship. *JAMA* **2005**, *293*, 1100. [CrossRef]
33. Wasp, G.T.; Kaur-Gill, S.; Anderson, E.C.; Vergo, M.T.; Chelen, J.; Tosteson, T.; Barr, P.J.; Barnato, A.E. Evaluating Physician Emotion Regulation in Serious Illness Conversations Using Multimodal Assessment. *J. Pain Symptom Manag.* **2023**, *66*, 351–360.e1. [CrossRef]
34. Sodeke-Gregson, E.A.; Holttum, S.; Billings, J. Compassion satisfaction, burnout, and secondary traumatic stress in UK therapists who work with adult trauma clients. *Eur. J. Psychotraumatology* **2013**, *4*, 21869. [CrossRef]
35. Čolić, M.; Dababnah, S.; Garbarino, N.; Betz, G. Parental experiences raising children with autism spectrum disorder in Eastern Europe: A scoping review. *Int. J. Dev. Disabil.* **2022**, *68*, 1–13. [CrossRef]
36. Hodgetts, S.; Nicholas, D.; Zwaigenbaum, L.; McConnell, D. Parents' and professionals' perceptions of family-centered care for children with autism spectrum disorder across service sectors. *Soc. Sci. Med.* **2013**, *96*, 138–146. [CrossRef]
37. Parker, M.L.; Diamond, R.M.; Del Guercio, A.D. Care Coordination of Autism Spectrum Disorder: A Solution-Focused Approach. *Issues Ment. Health Nurs.* **2020**, *41*, 138–145. [CrossRef]

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.