



Pathways to Identification, Diagnosis, and Treatment of Autism Spectrum Disorder in Young Children

Linda Arpino, MA, RD, CDN, Nancy DiMaggio, Mariel Taratunio, Team Mentor: Patricia O. Towle, Ph.D^{1,2}

¹Westchester Institute for Human Development, ²New York Medical College



BACKGROUND

Early detection of Autism Spectrum Disorder (ASD) is crucial so treatment can begin as soon as possible. Recent literature has investigated the age of ASD diagnosis in relation to many features; however, no studies have described how community resources are accessed and how patterns of access may be related to delay in ASD diagnosis.

OBJECTIVES

1. To describe the age of entry into early intervention (EI), of ASD identification, of ASD diagnosis for young children and the relationships between them.
2. To describe community professionals consulted by parents for ASD diagnosis.

COMMUNITY PARTNERS

Westchester County Department of Health (WCDOH)
Early Intervention Program

METHOD

Chart Review: 127 EI charts of children with ASD. **Instruments:** EI Timeline Protocol; demographics; consultants. **Procedure:** Developed EI Timeline Protocol; abstracted chart information.

RESULTS

DEMOGRAPHICS

Parents in this sample have a high level of education. The child male : female ratio is 4.5:1

Parent Education Level (n = 107)			Child Gender Distribution (n = 127)	
Education Level	Mother	Father	Male	Female
2-4 years College	55%	54%	104	23
≥ Master's Degree	45%	46%	82%	18%

OBJECTIVE 1: AGES

MEAN AGES (in months) and SDs		
EI Entry (n=127)	Identification (n=126)	Diagnosis (n=122)
22.7 (7.0)	25.3 (5.0)	27.8 (6.4)

MEAN AGES (in months) and SDs ACROSS PATHWAYS

Children who are not identified as soon as they enter EI have a delayed diagnosis.

Mean Age	1 (n= 43)	2 (n=10)	3 (n=31)	4 (n=22)	5 (n=15)	6 (n=6)
Entry EI	25.7 (5.4)	27.3 (5.1)	23.7 (3.3)	21.5 (4.5)	8.1 (3.0)	27.8 (5.2)
ID	25.7 (5.4)	25.0 (5.9)	23.7 (3.3)	27.0 (4.5)	24.2 (6.0)	27.8 (5.2)
Dx	25.7 (5.4)	25.0 (5.9)	29.1 (3.6)	29.6 (4.0)	27.6 (11.8)	42.0 (3.0)

- Child was diagnosed at entry only when a Psychologist performed the evaluation.
- For children who were identified with ASD at first evaluation, the mean number of months to diagnosis was 5 months.
- For children NOT identified with ASD at first evaluation, the mean number of months to diagnosis was 8 months.

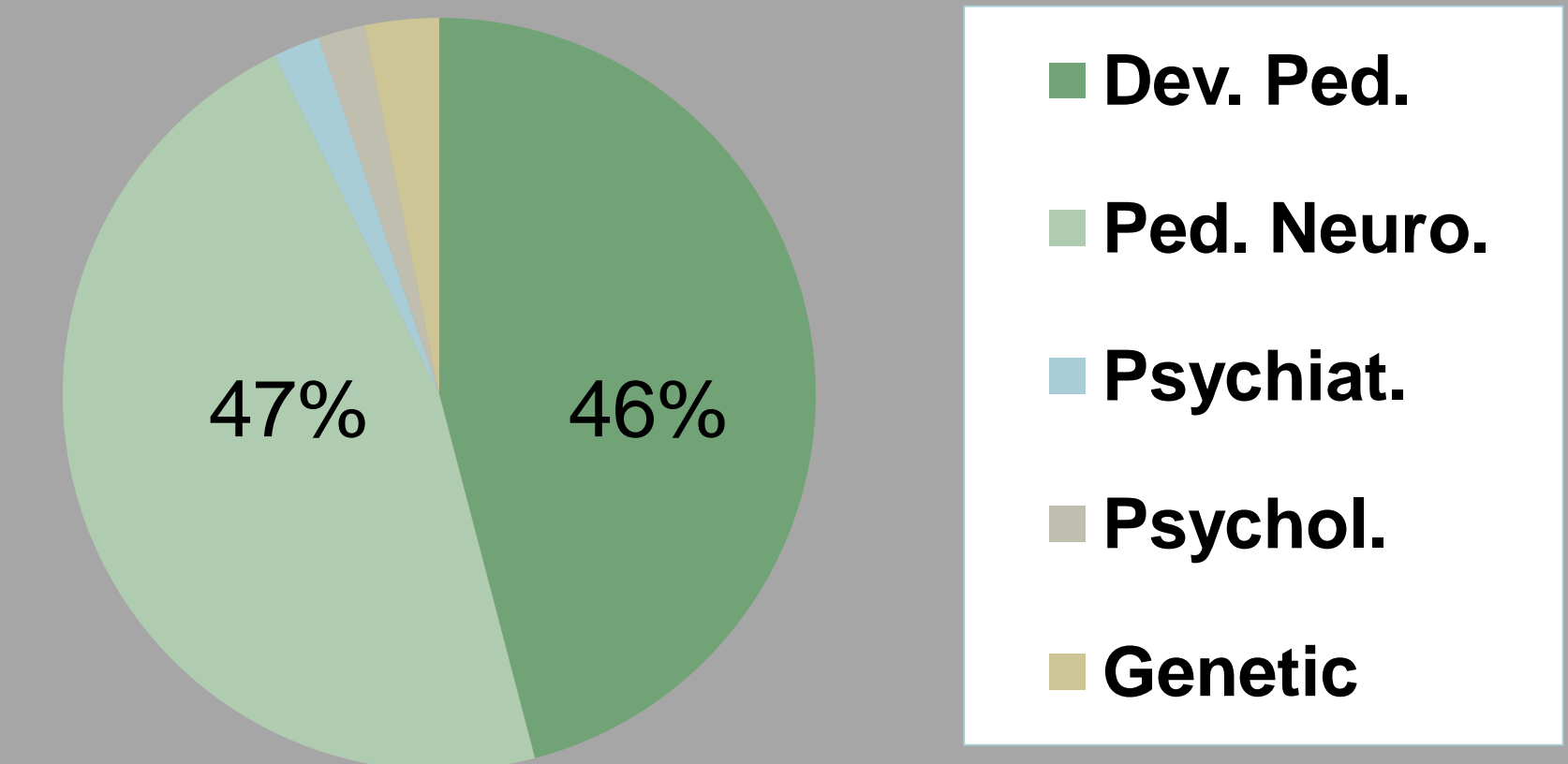
PATHWAYS

Distinct patterns of access to obtain a diagnosis are described. Most children are identified and diagnosed at EI entry. Of our EI sample, 96% were diagnosed within EI.

		N	%
1	Child enters EI, is identified and diagnosed with first evaluation.	43	34
2	Child enters EI with an ASD diagnosis.	10	8
3	Child enters EI and is identified but not diagnosed, but then diagnosed with a later evaluation during the EI period.	31	24
4	Child enters EI and is NOT identified but is eventually identified and diagnosed with a later evaluation during the EI period.	22	17.3
5	Child enters EI early, and is identified and diagnosed later during the EI period.	15	12
6	Child is identified or not at EI entry, but is not diagnosed during the EI period.	6	4.7

OBJECTIVE 2: CONSULTANTS

TYPES OF PROFESSIONALS CONSULTED BY PARENTS
Developmental pediatricians and pediatric neurologists were the most likely to be consulted for a diagnosis.



Children diagnosed by community professional: 22%
Children diagnosed through EI only: 58%
Children diagnosed through both: 20%

SUMMARY AND DISCUSSION

- Different patterns were identified regarding the relationship between age of EI entry and age of ASD diagnosis or identification.
- Failure to identify ASD at EI entry led to a significant delay in diagnosis.
- However, 96% did receive a diagnosis in EI, whether through EI only or with community consultation.
- Pediatric neurologists and developmental pediatricians were the most frequently consulted private professionals.
- These data provide a basis of comparison for other counties with different demographics.