January 2022



# Parental reporting of child development in the first year of life

# Background

Parents are often the first to notice and report developmental differences in their children.

However, it remains unclear how these differences affect children who will later receive a diagnosis of autism.

Greater understanding of early developmental differences may help find new ways to achieve an earlier diagnosis.

# Who took part

- 423 children who had received a diagnosis and were under the age of 6 at the time of participation in the Australian Autism Biobank
- Information was taken from parent-reported questionnaires on their child's development in their first year of life.

## Aim

To understand at what age parents noticed developmental differences in their children, and how and when this led to specialist consultation and autism diagnosis.

## How we did the research

To help ensure that parents could more accurately remember their child's early development, we limited this study to children who were 6 years or younger at the time they participated in the Australian Autism Biobank.

We looked at the:

- types of developmental differences that parents reported in their child's first year of life
- age at which parents thought a specialist was needed
- · age their child received a diagnosis.

# What we found

The range of early developmental differences that parents reported were grouped into eight areas: Language Developmental differences Social development reported at 6 months Stereotyped/restricted behaviour or less Motor development Developmental Behaviour/temperament differences reported at Medical issues 7 to 12 months Sleeping and feeding challenges Other idiosyncratic development 5% 10% 15% 20%



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#### What we found

#### There is a significant diagnostic delay.

Parents thought they needed to seek help earlier when they noticed developmental differences in almost all areas.

#### 7-12 months

over 60% of parents identified at least one area of developmental difference at this stage

#### • 22 months

average age that parents thought specialist consultation was needed for their child

#### • 37 months

average age of diagnosis

For every extra area where a parent noticed developmental differences, they sought specialist help 10-11 weeks earlier and their child was diagnosed 6 weeks earlier than parents who reported no areas of developmental differences.

However, only two areas – social development or stereotyped/restricted behaviour – led to an earlier diagnosis. Some specific subdomains within these two areas were significantly related to an earlier diagnosis. These were associated with:

- an absence of social or non-verbal communication
- · response to social information
- gaze
- over/under sensory sensitivity
- fixation with parts of objects.

#### What this means

# Clinicians may benefit from greater education regarding the breadth of developmental areas related to autism.

This may help decrease the age of diagnosis for all children, not just those with developmental differences that align with common conceptions of autism. This includes the less well-known signs of autism, as well as atypical development in areas such as motor development, behaviour, and sleeping and feeding.

Parent reports of developmental differences should be taken seriously as their autism-specific concerns were predictive of an earlier autism diagnosis.

### Who did the research





## Australian Autism Biobank

The Australian Autism Biobank is Australia's largest collection of biological, behavioural, environmental and medical information of children on the autism spectrum and their families.

For more information, visit autismcrc.com.au/biobank