

Interventions for Parents of Children with Autism Spectrum Disorder: Umbrella Review

Yasmine Syifa Nabila Budi (ID: 31020313)^a, Katrina Williams^{a,b}, Georgina Cox^{a,c}
Department of Pediatrics & Education Research, Monash University, Melbourne, Australia
Monash Children Hospital, Melbourne, Australia
Department of Neurodevelopment and Disability, The Royal Children Hospital, Melbourne Australia



Background

- Parents of children with autism spectrum disorder (ASD) are prone to poor mental health condition and poor psychological well-being ^{1,2}
 - Depression
 - Anxiety
 - Stress



Aims and Objectives

- Completing an umbrella systematic reviews** to synthesise and compile evidence about interventions for **parents of children with ASD**
- Describe interventions and therapies delivered by clinician** which are suitable and effective for parents of ASD children.
- Review the risk of bias (ROB) and quality of the included reviews**

Stress build up after red flags

Difficulties in communicating worries

Isolation from peers
Judgement and criticism
Grief and Losses

Prioritize their child rather than their own mental health



Methods

- This research uses established methods for umbrella systematic reviews and a qualitative approach for data synthesis. ⁶
- Risk of bias and quality assessment is conducted with: ROBIS tool. ⁶
- ROBIS ratings are; HIGH, LOW and UNCLEAR
- There are 930 records identified through our search and it yields 9 reviews (see Figure 1)

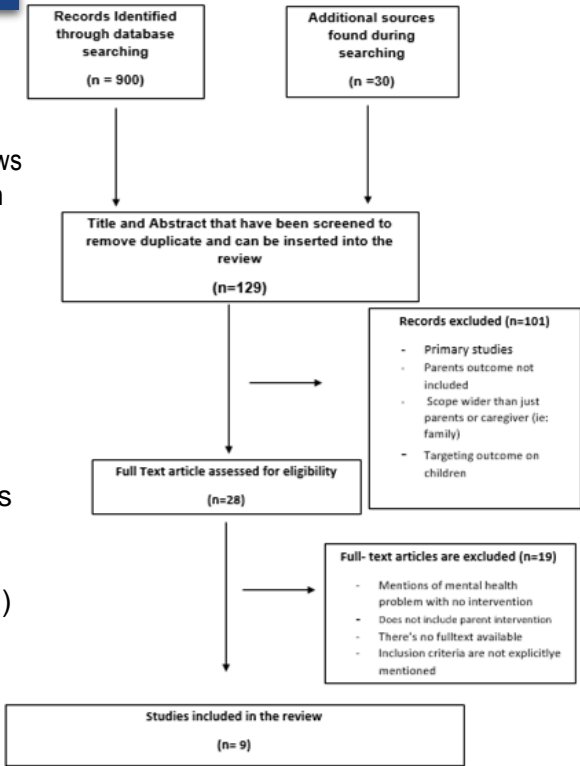


Figure 1: PRISMA Figure

Results

- 6 Systematic Reviews and 3 Meta-Analyses, from high income countries (the USA, Australia and the UK) were included.
- There were six types of intervention included (see Textbox 1), with total sample size of 3.952 samples. ^{1-5,7-10}
- Most interventions were reported to be effective (see Table 1) ^{1-5,7-10}
- Behavioural and Coping Mechanism is only calculated by three intervention; Mindfulness (behavioural and coping mechanism), Psychotherapy (behavioural regulation) and Parental Education (coping mechanism). ^{1-5,7-10}
- Parent intervention were delivered in; clinics, hospital, or home-based with several modes including face to face consultation, group therapy, and online consultation.
- The quality of the reviews varied, with only 4 reviews with a low risk of bias (see Table 2)

Textbox 1 : Type of Parent Intervention

- Mindfulness (n=1467)
- Parental Education (n=975)
- Psychotherapy (n=909)
 - Cognitive Behavioural Therapy (n=309)
- Acceptance and Commitment Therapy (n=168)
 - Parental Support Group(n=124)

Table 1: Outcomes reported in included reviews

Types of Intervention (N participants)	Author	Psychosocial Outcomes	Stress and Distress	General Wellbeing	Quality of Life
Mindfulness (1467)	Rutherford et.al		CI= -0.98, -0.07		
	Merriman et.al				
	Catalano et.al				
	Yu et.al	CI =.36, .62			
	Cachia et.al				
	Da Paz et.al	CI= 0.36-0.42			
	Townshend et.al				
	Hartley et.al			CI = 0.21-0.65	1.52-1.88
ACT (168)	Merriman et.al				
	Catalano et.al				
	Yu et.al	CI =.36, .62			
	Townsend et.al				
	Da Paz et.al				
CBT (309)	Yu et.al	CI= .30, 0.95			
	Merriman et.al				
Psycho-intervention & Psychotherapy (909)	Yu et.al	CI= 0.10, .28			
	Da Paz et.al				
Parental Education (975)	Yu et.al	CI= -.14, 1.18			
	Da Paz et.al				
	Rutherford et.al	(-0.32, 1.25)			(-1.52, -0.49)
	Catalano et.al				
	Al-Oran et.al				
Parental Support Group (124)	Rutherford et.al				
	Catalano et.al				
	Yu et.al	- .19, .32			

Green; indicates effective, Red; unfavourable outcome, Yellow; Not sufficient data

Table 2 : ROBIS assessment, a summary of concerns.

Study	Specification of study eligibility criteria.	Methods used to identify or select studies	Methods used to collect data and appraise studies	Synthesis and findings	Overall review RoB
Da Paz 2017	HIGH	LOW	HIGH	HIGH	HIGH
Cachia: 2017	LOW	HIGH	HIGH	LOW	LOW
Al-Oran. 2019	HIGH	HIGH	HIGH	HIGH	HIGH
Rutherford. 2019	LOW	HIGH	LOW	HIGH	HIGH
Townshend. 2019	LOW	LOW	LOW	LOW	LOW
Hartley, M.2019	LOW	LOW	LOW	HIGH	LOW
Yu. 2019	LOW	LOW	LOW	LOW	LOW
Catalano; 2020	LOW;	HIGH	UNCLEAR	UNCLEAR	UNCLEAR
Merriman; 2020	LOW;	HIGH	LOW	UNCLEAR	HIGH

Conclusion and Discussion

- Parents of children with ASD are likely to benefit from formal psychological interventions and support provided by clinicians. ^{1-5,7-10}
- Outcomes reported reduced psychological symptoms and increased general well-being. ^{1-5,7-10}
- There is emerging evidence of effectiveness for parent-targeted intervention. ^{1-5,7-10}
- Data regarding the most effective intervention, timing, settings and delivery are not yet available. ^{1-5,7-10}

Future Directions

Research

- Reviews need to include ROB assessment
- Pragmatic trials are needed to see direct implementation.
- Trials should measure a variety of outcomes, since the report on the quality of life is not yet adequate.
- Trials should measures the long-term outcome from each intervention

Clinical

Clinicians have the opportunity to discuss psychological wellbeing with parents and offer to connect them with formal psychological support if needed

References

