







# A SYSTEMATIC REVIEW OF PARENTAL PROGRAM TO PREVENT AND MANAGE DELAY DEVELOPMENT AMONG EARLY CHILDHOOD

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## Outlines

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## Introduction

- Delay development is a crucial problem among early childhood with a prevalence of about 1% to 3% of the total population
- The delay developmental has negative impacts on emotional, behavioral and health problems
- Parents are fundamental key persons in an individual's process of child rearing
- the lack of skill in childcare and child rearing is common among parents
- To demonstrate effective strategies, our study aimed to extract relevant studies to determine ways to handle the problem and to promote early life development.



# Study objective

The review aimed at explaining and describing toward developmentally delay and its management to prevent and manage developmentally delay among early childhood



## Method

#### Data Sources

- PubMed, Scopus, Web of Science
- Keywords: "parenting-based program," "delay development," "early childhood," "factors related to delay developmentally," and "parenting style."

#### Inclusion of criteria

- Studies focused on parenting program of developmental delay
- Full-text English language publications published in 2007 and 2018
- Studies measured the parenting style along with any determinants and predictors of developmental delay n both qualitative and quantitative studies



## Method

- Quality Assessment
  - Consolidated Standards of Reporting Trials (CONSORT) → RCT studies
  - Keyko's Instrument → Cross-sectional studies

#### Synthesis of Results

Content analysis was used in this review to synthesize the results from both the quantitative and qualitative studies



## Consort

Table 1. Quality assessment summary of experimental studies

| Quality assessment summary of<br>experimental studies | Study<br>1 | Study<br>2 | Study<br>3 | Study<br>5 | Study<br>6 | Study<br>7 |
|---|------------|------------|------------|------------|------------|------------|
| 1. Random sequence generation                         | 1          | 1          | 1          | 1          | 1          | 1          |
| 2. Allocation concealment                             | 1          | 1          | 1          | 1          | 1          | 1          |
| 3. Blinding of participants                           | NM         | 1          | NM         | NM         | 1          | 1          |
| 4. Blinding of personnel/care providers               | NM         | NM         | NM         | 0          | 1          | 1          |
| 5. Blinding of outcome assessor                       | 1          | 1          | 1          | 1          | 1          | 1          |
| 6. Complete outcome data                              | 1          | 1          | 1          | 1          | 1          | 1          |
| 7. Selective reporting                                | 1          | 1          | 1          | 1          | 1          | 1          |
| 8. Group similarity of baseline                       | 1          | 1          | 1          | 1          | 1          | 1          |
| 9. Co-interventions                                   | 1          | 1          | 1          | 1          | 1          | 1          |
| 10. Compliance  | 1          | 1          | 1          | 1          | 1          | 1          |
| 11. Intention to treat analysis                       | 1          | 1          | 1          | 1          | 1          | 1          |
| 12. The timing of outcome assessment                  | 1          | 1          | 1          | 1          | 1          | 1          |
| 13. Other bias  | 1          | 1          | 1          | 1          | 1          | 1          |
| Total   | 10         | 11         | 10         | 10         | 12         | 12         |

Overall study validity rating:

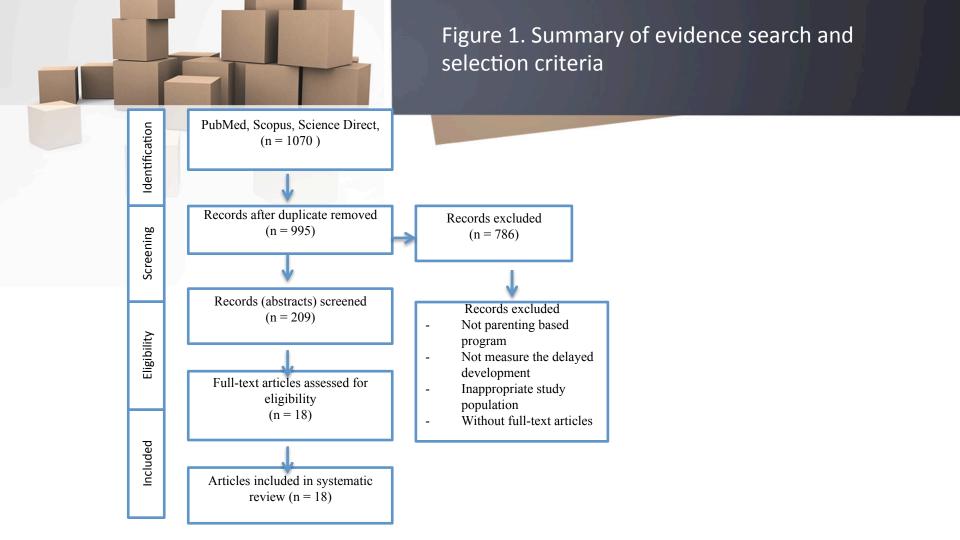
(0-4 = low; 5-9 = Medium; 10-13 = High)



# Keyko's instrument

Table 2. Quality assessment summary of correctional studies

| Quality assessment summary of correlational studies   | Study<br>4 | Study<br>14 | Study<br>15 | Study<br>16 | Study<br>17 | Study<br>18 |
|---|------------|-------------|-------------|-------------|-------------|-------------|
| Design  |            |             |             |             |             |             |
| Was the study prospective?  | 1          | 1           | 1           | 1           | 1           | 1           |
| 2. Was probability sampling used?   | 1          | 1           | 1           | 0           | 0           | 0           |
| Sample  |            |             |             |             |             |             |
| <ol> <li>Was the sample size justified?</li> </ol>  | 1          | 1           | 1           | 1           | 1           | 1           |
| 2. Was the sample drawn from more than one site?  | 1<br>1     | 1<br>1      | 1<br>1      | 1<br>1      | 0           | 0           |
| <ol><li>Was anonymity protected?</li></ol>  | 1          | 1           | 1           | 1           | 1           | 1           |
| 4. Response rate more than 60%  |            |             |             |             |             |             |
| Measurement   |            |             |             |             |             |             |
| <ol> <li>Was the factor measured for reliability?</li> </ol>  | 1          | 1           | 1           | 1           | 1           | 1           |
| Was the factor measured using a valid instrument?   | 1          | 1           | 1           | 1           | 1           | 1           |
| Measurement of DV   |            |             |             |             |             |             |
| Are the effects observed rather than self-  | 0          | 0           | 0           | 0           | 0           | 0           |
| reported?   |            | 0           |             |             |             |             |
| <ol><li>Did the scale used for measuring the outcomes<br/>have an internal consistency more than 70</li></ol> | 1          | 1           | 1           | 1           | 1           | 1           |
| 3. Was a theoretical model/framework used for   | 1          | 1           | 1           | 1           | 1           | 1           |
| guidance?   |            |             |             |             |             |             |
| Statistical analysis  |            |             |             |             |             |             |
| If multiple factors were studies, are correlations analyzed   | 1          | 1           | 1           | 1           | 1           | 1           |
| 2. Are outlier managed  | 1          | 1           | 1           | 1           | 1           | 1           |
| Total   | 12         | 12          | 12          | 11          | 10          | 10          |
|   | 12         | 12          | 12          | 11          | 10          | 10          |
| Overall study validity rating:<br>(0-4 = low; 5-9 = Medium; 10-13 = High)                                     |            |             |             |             |             |             |





# Results

| Domains                                 | Skill & Components   |
|---|--|
| Physical, developmental domain          | Gross movements, fine movements, hand to eye coordination, balance and kinesthetic sense   |
| Cognitive developmental domain          | Intellectual development of childhood, Childhood creativity  |
| Language developmental domain           | Correct sound production to express the words Proper use of words Grammatically correct language Appropriate tone, gestures and body language in some situations                 |
| Social and emotional development domain | Social and emotional development domain deals are the children's ability to understand the expressions of emotions, form attachments, play with others, and handle peer pressure |



# Results

| Instruments<br>Measured                     | Instruments   |
|---|---|
| Cognitive development instrument            | Basley Scale of Infant Development-II   |
| Physical development instrument             | Basley Scale of Infant Development-II, Peabody Developmental Motor Scale-Second Edition |
| Language development instrument             | Mandarin-Chinese Communicative (CDI) Communicative Development-Inventory                |
| Social and emotional development instrument | Scale of Strengths and Difficulties   |



# Results

| Program  | Defining  |
|--|---|
| Triple P-Positive Parenting Program (Triple-P) | multilevel program and offer treatment to solve problems of severe behavioral, emotional, and developmental                               |
| Smalltalk program                              | Increasing the responsive parenting behaviors, stimulating the home learning environment, education program, facilitating a home coaching |
| Bono de Desarrollo<br>Humano (BDH) program     | A cash transfer program requiring certain behaviors of household members to receive program benefits                                      |



## conclusion

- The findings of this study can be as valuable information for health care provider before designing parenting style intervention to prevent physical, mental, social, and language delay among childhood
- A limitation is still encountered in this study since we described the results in a narrative form rather than systematic and metaanalysis



# Thank You .....