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An overview of studies on psychological well-being in children born following assisted reproductive technologies

辅助生殖技术儿童的心理发展的研究综述

Key words: Assisted reproductive technologies, Psychological well-being, Behavior problems, Parent-child relationship

关键词：辅助生殖技术；心理发展；行为问题；亲子关系

- Assisted reproductive technologies (ARTs) have been increasingly used worldwide, so the psychological development of children born following ARTs has become a major concern.

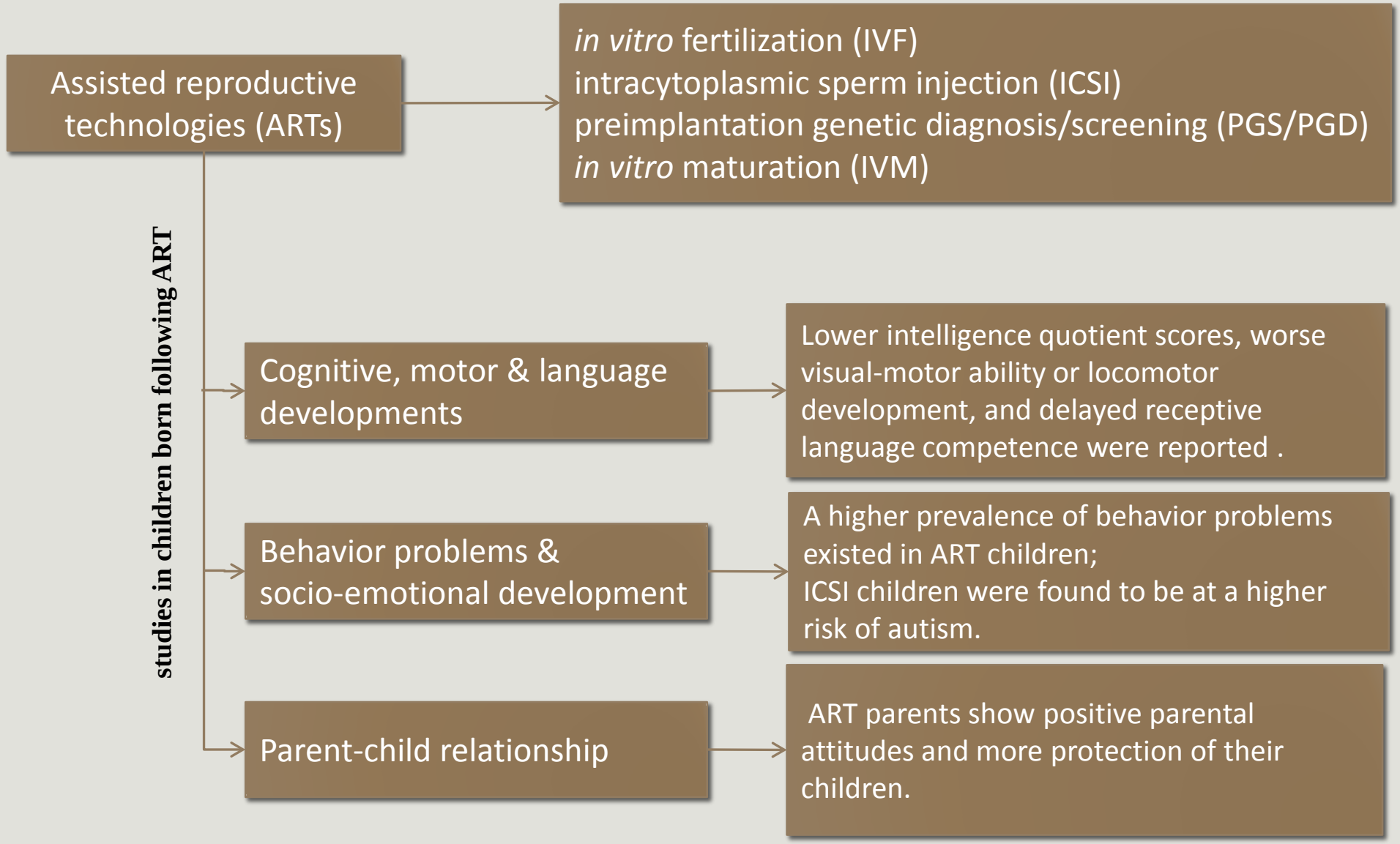
- This review gives a systematic view of psychological well-being of children conceived by different types of ART, including *in vitro* fertilization(IVF), intracytoplasmic sperm injection (ICSI), preimplantation genetic diagnosis/screening(PGS/PGD), and *in vitro* maturation(IVM).

- The previous studies are analyzed in three sections: (1) cognitive, motor, and language developments, (2) behavior problems and socio-emotional development, and (3) parent-child relationship.

- The majority of the studies on cognitive, motor, and language developments reported comparable achievements in the ART group vs. the naturally conceived group, but lower intelligence quotient (IQ) scores, worse visual-motor ability or locomotor development, and delayed receptive language competence were also found in the ART group.

- The results on the socio-emotional development were reassuring. As for the behavior problems, a higher prevalence of behavior problems existed in ART children and ICSI children were found to be at a higher risk of autism than the general population.

- The vast majority of the data on home environment suggest that ART parents, especially ART mothers, show positive parental attitudes and more protection of their children throughout their development.


Assisted reproductive technologies (ARTs)
in vitro fertilization (IVF)
intracytoplasmic sperm injection (ICSI)
preimplantation genetic diagnosis/screening (PGS/PGD)
in vitro maturation (IVM)
studies in children born following ART
Cognitive, motor & language developments
Lower intelligence quotient scores, worse visual-motor ability or locomotor development, and delayed receptive language competence were reported .
Behavior problems & socio-emotional development
A higher prevalence of behavior problems existed in ART children;
ICSI children were found to be at a higher risk of autism.
Parent-child relationship
ART parents show positive parental attitudes and more protection of their children.