

The neurological assessment of the infant (ages birth to 12 months)

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The Neurological Assessment of the Infant – Ages Births to 12 months Total

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Nutritional deficiency during the mother's pregnancy period and the child's infancy stage are some of the main reasons why a child could not reach their maximum motor, cognitive, and socio-emotional development (Prado & Dewey, 2014). Furthermore, "fetal exposure to stress" can also contribute to the development of impairment on the infant's central nervous system, cognitive, and emotional development (Sandman et al., 2011: 1).

Spittle et al. (2014) mentioned that pre-term babies who were born less than 30 weeks of gestation are at risks of having long-term neurodevelopmental impairment as compared to term-born babies (i. e. motor, cognitive, and socio-emotional or behavioral impairment). Because of the presence of developmental disorders, pre-term babies are at risks of experiencing more serious problems with regards to their motor, cognitive, and behavioral functioning as they grow older (Tronick & Lester, 2013).

The best way to check the whether or not an infant is at risk of having developmental disability or disorder is to conduct neurological assessment/examination (Hadders-Algra et al., 2010). Aside from testing the potential link between an infant's neurological, motor, and behavioral functioning, Noble and Boyd (2012) mentioned that it is possible to conduct both neuromotor and neurobehavioral examinations not only to detect potential dysfunction on the infant's central nervous system. Often times, neurobehavioral examination is necessary to learn more about the infants' behavioral strengths and weaknesses (Brown & Spittle, 2015).

In practice, there are quite a lot of neurological tools which can be used in

the actual examination. For instance, Tronick and Leste (2013) mentioned that NICU Network Neurobehavioral Scale (NNNS) can be use in detecting signs of neurobehavioral impairment among infants. In another study, Gabriel, Formiga and Linhares (2013) mentioned that the Neurobehavioral Assessment of Preterm Infant (NAPI) can be use to examine pre-term infants' body movements, alertness, and cry among many others. Through early assessment, healthcare professionals can advice the child's parents about the most appropriate intervention to consider (Brown & Spittle, 2015).

Infant Milestones for the First 12 Months of Life

Months

Gross Motor

Fine Motor

Socio-Emotion

Language

1st

Can turn head or chin up

Fist of hands

Cry when distressed

Make some " throaty" sound

2nd

Chest up while in prone position

Ability to unfist hands; can move hands together

Smiles back to people

Can make " vowel" sounds

3rd

Can roll from side-to-side

Observes hand movements

Make some facial expression when tasting sour foods or hearing loud noise

Can do vocalization

4th

Can sit provided that there is a trunk support; can roll to front or back

Ability to grasp on clothes; play the rattle with hands

Smiles often when hearing sound

Laughing; stop crying once the infant hears familiar voice

5th

Can sit while arms support the trunk

Putting objects from hand-to-mouth

Recognizes family members

Respond when name is called

6th

Can handle weight using 1 hand

Reach objects using a hand

Cries when seeing strangers

Listen to "no" command

7th

Can sit w/out support

Grasping

Non-verbal cues when asking for help

Increase in the use of syllables

8th

Crawl; from sitting to kneel position

Bang an object

Show signs of being happy and sad

Respond to " come here"; says " papa"

9th

Stand on hands/feet; learns to walk

Bang 2 objects

Use sound to get attention

Says " mama"; imitate sound

10th

Walks by holding on objects

Pokes

Sense of fear; recognizes name calling

" peek-a-boo"; wave hands

11th

Stand for a second

Throw objects

Give objects to people

Dance with music

12th

Stands on his own

Scribble; holds pen

Points on an object

Gesture like pointing finger

Source: Gerber, Wilks & Erdie-Lalena, 2010

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