UNDERSTANDING THE PAEDIATRIC PATIENT
– A COGNITIVE AND PSYCHOSOCIAL PERSPECTIVE

Natalie Ong

Children attending the general practice clinic constitute a significant proportion of patients a GP sees on a daily basis. They are dynamic developing individuals progressing along trajectories of motor function, cognition, language and psycho-social maturity. The aim of this article is to provide a guideline on the normal development of a child from the cognitive and psychosocial point of view.

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Developmental Paediatrics in the General Practice clinic

Growth and development of children are strongly influenced by risk and resilience factors either from their genes or the environment. Not all have reached temperamental or cognitive maturity to understand what is happening to them nor the full ability to communicate their concerns. Most communication still occurs at the adult level with little attempts at gaining the understanding of the child in the doctor-patient relationship. All these factors are very disempowering and could lead to negative psychological effects and compliance issues.

A recent editorial published in the Singapore Medical Journal last year highlighted the great need for continued medical education in this field. Whilst most information about child development centre around their motor function, language and academic abilities, it is as important to understand the cognitive and psycho-social aspects as well. Understanding at what level certain behaviours, cognitive abilities and psycho-social stages are normal is crucial in picking up potential problems early. Implementing early intervention should follow suit before certain undesirable behaviour becomes entrenched or developmental catch up becomes too difficult. In addition, parents of a child with significant developmental or behavioural problems would be able to educate and prepare themselves for what is to come in their child’s developmental trajectory.

What developmental tools do we have in Singapore?

In Singapore, whilst there is continued research on which screening tools are suitable for the local setting, developmental assessments still adhere to the principle of the Denver II system. This assessment tool which was developed in Denver, Colorado has been normed in Singapore. It covers four areas in the child’s development namely, gross motor, fine motor, speech and language and social-emotional. Whilst the formal Denver II assessment has good sensitivity but poor specificity and positive predictive value, researchers recommend that it should be used as an aid to monitor development and not used in isolation. It is neither designed to give a development quotient (score) nor for diagnostic/prognostic usage. It should be used like a growth chart with clinical judgement determining whether or not to refer the child for further evaluation.

The Cognitive Development of the Child

2 years
- imitate simple everyday activities in pretend play eg. feeding a doll
- think symbolically but still not able to transfer a conclusion into another situation eg. if they know pulling a pot of a stove is unwise, this may not translate into pulling at a corner of a high pile of sheets
- use their own experiences to understand familiar situations eg. if a relative dies in hospital, it may cause fears about going into hospital
- fully understand when told not to do something
- begin to assert themselves by opposing the will of parents
- pre-reading activities eg. enjoy flipping the pages and looking at picture books, having their favourite story read to them

3 years
- reduction of separation anxiety as they become comfortable in familiar surroundings in the absence of their parents

4 years
- self centred view point eg. a car accident or parents fighting could be taken to be their fault, believing that good behaviour prevents bad occurrences
- “Visual thinkers” - concrete thinking is still the predominant form of thought
- Play is an important way of developing ideas.

5 years
- make sense of comic pictures (words are unimportant) and follow the pictures sequentially
- enjoy watching television, recognizing cereal brands, trade marks, logos and differentiating cars
- capable of simple forms of reasoning, working for praise and attention rather than the satisfaction of doing what is right.

6-7 years
- logical thinking develops from straightforward thinking and direct answers
- see flaws in their parents points of view
- apply from their past experiences to new experiences eg. “I will slip again if I step on this toy like the last time”
- Imaginative thinking develops eg. turning back the clock
- taking things apart and putting them back together to see the relationship of the different parts together
- learning to see things from a different perspective

7-8 years
- complex reasoning by having long term plans and seeking intellectual rewards eg. having the satisfaction of getting it right
- growing out of the “self centred” view of the world eg. permanence of death is realized based on life experiences of other people, parents fights are not necessarily a fault of theirs
- gradual development of abstract reasoning skills

8-10 years
- adult type logic is in place as they can see meaning and intention behind things

Adolescence
- ability to deduce from situations
- development of preoccupation with ideas and values start to take place.
The Development of Humour

A sense of humour is a good way of demonstrating the child’s developing ability to think. Occurs as a result of rapid language advancement. School is a place for learning vocabulary too especially if the language taught is not spoken at home. Early school children love absurd riddles and puns (similar sounding words can mean different things).

The Development of Feelings

2 years
- aware of others feelings eg. offer a toy or a hug if another child is hurt.

5 years
- distinguish between a deliberate or an accidental act
- fairly good at talking about and coping with their feelings, responding to others feelings

8-10 years
- others can have an experience outside of the immediate situation eg. a friend is upset because her mother has been ill or hearing about the plight of famine victims

6 years
- feel guilty for saying something to hurt someone else and try to make up for what they have done
- able to tell that something is not correct and decide not to do it again

The Development of Self Awareness

Primary school
- self awareness is on what is visible and practical
- 5 years - able to tell you their name, sex, age and who looks after him/her and what are their interests
- 8 years
  o aware of their inner selves and are able to identify qualities of themselves and of others eg. shy, hardworking
  o increasing interest in body processes and they become increasingly concerned about their health and can get quite upset over origins of certain foods
- 11-12 years -
  o possess a rich description of themselves eg. attitudes, values making distinction of themselves esp. personal attributes
  o understand that sometimes the way they feel can be contrary to what they would like to be and can be critical of themselves
The Development of Values

- early childhood
  - The rights and wrongs that the child experiences become the value system that motivates their behaviour in society
  - values of their parents as rules of an authority figure
  - motivated by fear of punishment and a desire for being rewarded.
  - achieve ‘goodness’ because of compliance with the family’s social rules
  - as they learn right from wrong they will still with the adults

- 9-10 years
  - realize that sometimes there is no right or wrong solutions but shades of ‘grey’
  - some values at home can sometimes be illogical

- Adolescence
  - values and morals as underlying universal principles that are applicable to all
  - Being sensitive to others and learning to respect differences in cultures

The Development of Relationships

- 3-4 years
  - ‘best friend’ relationships develop, pronounced but fragile
  - preschool is the first step in separating from parents - learning independence.

- primary school
  - able to cope with whole day separation

- 7-8 years
  - strong attachments in school and in the neighbourhood have been formed
  - plan and engage in routine activities which require less supervision

- 10-12 years
  - they are able to talk all about their good and bad relationships and the justification for those decisions
  - Appearance and behaviour are important and in school they can be ‘members’ in certain groups
  - participation in sports and extracurricular activities which require team work and self-discipline

- Adolescence
  - they may already have many roles to play eg. father’s helper, older brother, class prefect, scouts or guides
The Development of Socialisation

Preschool years
- learning to control their impulsivity and decide which behaviours are acceptable is a predominant social milestone
- disobedience and aggression are not displays of self confidence and exploration

Primary school
- develop individuality and naughtiness
- Social experiences in school will be as important as experiences at home and foster cooperation and competitiveness
- understanding reason behind rules
- time concepts and organizational skills are developed which enables planning and having more patience waiting for upcoming events

The Growth of Independence

Independence is relative to the amount of control one takes over one's life. The role of the parent is to initiate this process by setting the limits with rules and boundaries.
- toddlers – physical boundaries eg. not touching the hot stove.
- 5-7 year old – certain rules can be set eg. bedtimes, homework time, play time etc.
- School children - tend to think and feel and are less impulsive than toddlers
  - A measure of their independence is the ability to set their own values and make decisions without the adults eg. “it’s not fair” “it’s not my fault”.
  - Mid primary school they can think about themselves in situations in the future eg. 9 year old boy thinking about learning to drive, or 9 year old girl thinking about having babies when she grows up
  - interested in responsibilities
caring for others and the environment
how their body works and how to care for it
reproduction and sexuality

A significant increase in the child’s independence occurs during the transition from primary to secondary school. It is about coping with multiple subjects, classrooms, teachers and activities. To ‘survive’ in school, they need to know how to make decisions on how to run their lives.

Adolescence
- discussion and negotiation, giving choices, identifying options, listening to the child’s views and preparing to negotiate
- expected to take responsibility and initiative though not all may have reached this autonomous stage willingly
- freedom and privileges eg. going to movies with friends, catching public transport, choosing their own clothes, spending time alone at home should be negotiated on the basis of acting responsibly, being polite, fulfilling obligations eg. homework, cleaning own room
Being a Success

Every child develops an attitude for achievement, for some it is a strength and for others a weakness. How they adopt these attitudes have a lot to do with their attainment of independence and self reliance. The foundation for this outcomes are related to previous experiences of achievement in primary school or earlier. Parents play a supportive role but cannot alone bring success to their child. The child needs to believe that his/her own actions can influence outcome.