
Towards an evidence-based assessment of early motor development in the child health care setting

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Structured Observation of Motor Performance in Infants
Interobserver reliability in child health

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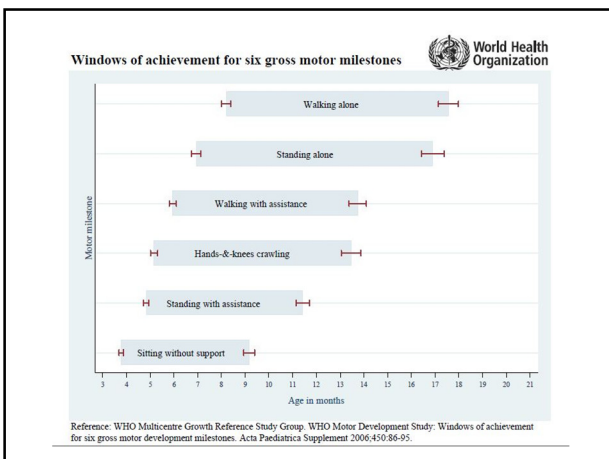
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 (submitted 2014)


Why?

1. The importance of early motor development
2. The importance of early intervention
3. The nurse's position in the Swedish Child Health Service


Milestones?

Dosman CF, Andrews D, Goulden KJ. Evidence-based milestone ages as a framework for developmental surveillance. *Paediatr Child Health*. 2012;17(10):561-568.
 Rosenbaum P. Classification of abnormal neurological outcome. *Early Hum Dev*. 2006;82(3):167-171.
 WHO Multicentre Growth Reference Study Group. WHO Motor Development Study: windows of achievement for six gross motor development milestones. *Acta Paediatr Oslo Nor* 1992 Suppl. 2006;450:86-95.




A → B



Idea: Rosenbaum 2006

So what did we do?



55 infants
10 nurses
3 child health centers
1 PT



SOMP-I at the CHC



Example of level and quality for the head in supine position



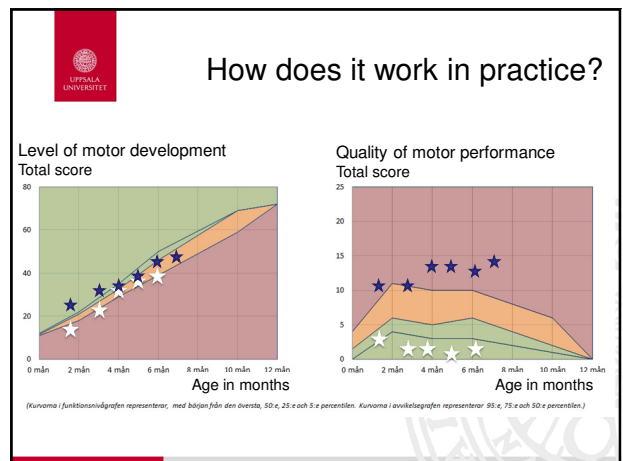
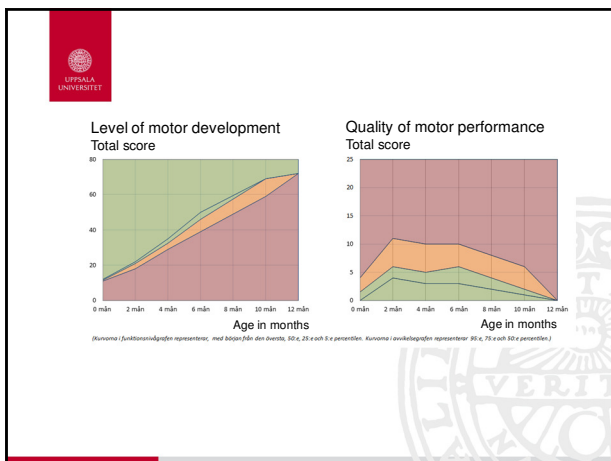
Level of motor development
The infant holds its head in the mid-line position and begins to turn its head.


Quality of motor performance
The infant holds its head facing forward for as long as it wants and begins to follow faces/objects/sounds toward both sides. The head is not tilted to the side and is not drawn back.

LEVEL QUALITY

PROBEN	NUVÅRD	POÄNG	UTVÄRDERING
KRIBBLAR	3	3	Står i midlinje D: Annet
ÄRVÄR DÖR INOMER	5	5	Hörselning D: Hörselning D: Hörselning
BÄL	4	4	Hörselning D: Hörselning D: Hörselning
BETT DÖR FÖRTER	6	6	Hörselning D: Hörselning D: Hörselning
TRÄSKAR	5	5	Hörselning D: Hörselning D: Hörselning
ÄRVÄR DÖR INOMER	3	3	Hörselning D: Hörselning D: Hörselning
BÄL	3	3	Hörselning D: Hörselning D: Hörselning
BETT DÖR FÖRTER	2	2	Hörselning D: Hörselning D: Hörselning
STÄRKE	3	3	Hörselning D: Hörselning D: Hörselning
STÄRKE	4	4	Hörselning D: Hörselning D: Hörselning
HÖRUPPTÄR	1	1	Hörselning D: Hörselning D: Hörselning
HÄNDELSTID	3	3	Hörselning D: Hörselning D: Hörselning
TOTALT	40	13	


Total score, level of motor development (40) and Total score, quality of motor performance (13).





What did our study show?

- Interobserver reliability for the assessment of level of motor development was excellent.
- Interobserver reliability for the assessment of quality of motor performance ranged from fair to poor.



Clinical reflections

- CHC nurses are able to assess motor development in a structured way
 - ↳ but it requires practice and supervision/coaching
- My clinical experience is that the implementation of SOMP-I as well as educating the nurses has reduced the number of referrals to the PT.
 - ↳ more detailed and accurate
 - ↳ come in a timelier manner



Thank you!

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