Early detection of parenting and developmental problems in young children: *development, results and implementation of the SPARK method*

Henk van Stel, Ingrid Staal, Maaike Deschoemaeker, Anne van Driessche, Japke de Ru

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SPARK workshop @ EUSUHM 2017
Early detection of parenting and developmental problems in young children: development, results and implementation of the SPARK method
Early detection of parenting and developmental problems in young children: a structured dialogue with parents

dr Ingrid Staal, dr Henk van Stel, prof dr Jo Hermanns, prof dr Guus Schrijvers
• Background
• SPARK

• Overview of the studies
Background

• Prevention and early detection important

• The Dutch preventive Child Health Care (CHC):
  – reaches almost all children
  – national standard set of tasks
  – risk assessment required, but no guidelines

• No suitable and valid instrument
  – younger age group
  – cover both the child and its family environment
  – using perspectives and experience of both parent and professional
SPARK

- **Structured Problem Analysis of Raising Kids**

- A broad-scope structured interview
- Age 18 months: transition from infant to toddler
- Uses parents’ concerns for a joint needs assessment by parents and CHC nurse
- Followed by a professional judgment on the risk level of future parenting and developmental problems
• Infancy review
• Somatic health
• Motor development
• Language, speech and cognitive development
• Language use of parents
• Emotional development
• Contact between child and others
• Child behaviour
• Parenting approach
• Developmental stimulation
• How the child spends his/her time
• Living environment in and outside the home
• Social contacts and informal support
• Day-care for the child
• Concerns communicated by others
• Family issues

SPARK topics
SPARK: 3 steps

• step 1: short description of each topic, questions about parents’ experienced concerns or problems
  – Severity of these concerns (Scale 1-5)
  – Looked for professional and/or informal help? Found?
  – Was the support sufficient?

• step 2: parents assess current need for support
  – 6-point scale from ‘no help needed’ to ‘immediate intervention required’
  CHC-professional assesses current need for support & overall risk
  – Need: identical 6-point scale
  – Risk: low – increased - high

• step 3: discussion with the parents about the amount and content of care needed in the following months
Ga met je muis over Scorekaart 1 voor een toelichting op de onderdelen.

**Scorekaart 1**

<table>
<thead>
<tr>
<th>1. Heeft u in de afgelopen 6 maanden vragen gehad of problemen ervaren bij (domein + voorbeelden):</th>
</tr>
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</table>
| 1 = geen
| 2 = weinig
| 3 = redelijk wat
| 4 = veel
| 5 = heel veel |

<table>
<thead>
<tr>
<th>2. Heeft u behoefte aan hulp en ondersteuning gehad?</th>
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</table>
| 1 = geen behoefte gehad
| 2 = wel behoefte gehad, maar niets gevraagd
| 3 = wel behoefte gehad, maar niets gevonden
| 4 = wel behoefte gehad en gebruikt |

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<tr>
<th>3. Van welke hulp en ondersteuning heeft u gebruik gemaakt? (kruis aan op scorekaart 2)</th>
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| 1 = ja
| 2 = min of meer
| 3 = nee |

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<th>5. Heeft u NU (nog) behoefte aan hulp en ondersteuning?</th>
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| 1 = geen
| 2 = info uit interesse
| 3 = persoonlijk advies
| 4 = begeleiding
| 5 = hulp nodig
| 6 = direct ingrijpen nodig |

<table>
<thead>
<tr>
<th>6. Inschatting van de JCZ over de nodige hulp en ondersteuning</th>
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| 1 = geen
| 2 = anticiperende voort.
| 3 = persoonlijk advies
| 4 = begeleiding
| 5 = hulp nodig
| 6 = direct ingrijpen nodig |

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**a. samenvatting zuigelingenperiode**

**b. gezondheid**

**c. motorische ontwikkeling**

**d. taal-spraak-denken ontwikkeling**

**e. taalgemeenschap ouders *indien van toepassing***

**f. emotionele ontwikkeling**

**g. omgang met anderen**

**h. gedrag van het kind**

**i. aanpak van opvoeding**

**j. ontwikkelingssstimulering & vroeg/voorschool educ**

**k. tijdbezoeking van kind**

**l. woon- en leefsituatie**

**m. (sociale) contacten & informele steun**

**n. opvang van kind**

**o. zorgen aangegeven door anderen**

**p. gezinszaken**

**q. iets vergeten, namelijk:**

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Ga met de muis over de routes.

**Scorekaart 1**

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**SPARK-Zorgtaxatie**

Inventariseren waar ouders mee zitten (voordeelen en huidige behoefte aan hulp en ondersteuning)

- [x] sommige veldverkenning
- [x] gezondheid
- [x] motorthandige ontwikkeling
- [x] taal-spraak-denk ontwikkeling
- [x] taalgebruik ouders "indien van toepassing"
- [x] emotionele onderneming
- [x] omgang met anderen
- [x] gedrag van het kind
- [x] aanpak van opvoeding
- [x] ontwikkelingsstagesnurking en vrije voorschool educ
- [x] Waar IPL PLA stapho
- [x] tijdbeleiding van kind
- [x] wonen- en leefomgeving
- [x] (sociale) contacten en informatie zaken
- [x] aantal contacten
- [x] opvang van kind
- [x] zorgen aangepast voor anderen
- [x] gezinszaken
- [x] iets vergeten, namelijk

**Instructie:**

1. Heeft u in de afgelopen 6 maanden vragen gehad of problemen ervaren bij (eigen - voordeelen):
   - [ ] geen
   - [ ] wat
   - [ ] veel
   - [ ] heel veel

2. Heeft u behoefte aan hulp en ondersteuning gehad?
   - [ ] geen behoefte gehad
   - [ ] wat behoefte gehad, meer
   - [ ] heel veel behandelt
   - [ ] heel veel behandeld
   - [ ] wat behoefte gehad en
   - [ ] heel veel behandeld

3. Van welke hulp en ondersteuning heeft u gebruik gemaakt (oorspronkelijk scorekaart 2):
   - [ ] geen
   - [ ] wat
   - [ ] veel
   - [ ] heel veel

4. Kunt u nu deze hulp en ondersteuning beter missen?
   - [ ] ja
   - [ ] min of meer
   - [ ] veel

5. Heeft u MIJ nog behoefte aan hulp en ondersteuning?
   - [ ] geen
   - [ ] wat
   - [ ] veel
   - [ ] heel veel

6. Instructie van de JSZ over de nodige hulp en ondersteuning:
   - [ ] geen
   - [ ] wat
   - [ ] veel
   - [ ] heel veel

**Instructie:**

1. [ ] geen
2. [ ] wat
3. [ ] veel
4. [ ] heel veel
5. [ ] ja
6. [ ] min of meer

**Instructie:**

Vul de scorekaart in en verzoek de ouders voor aanvullende informatie.
Concerns of parents and need for support

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1. Did you experience any concerns, questions or problems in the last six months concerning... (topic + examples)
   - 1 = not at all
   - 2 = a little
   - 3 = quite some
   - 4 = many
   - 5 = a great many

5. Are you in need of support or assistance NOW?
   - 1 = no
   - 2 = info out of interest
   - 3 = personal advice
   - 4 = counselling
   - 5 = intensive help
   - 6 = immediate action required

6. Assessment of need of support / assistance by CHC professional
   - 1 = none needed
   - 2 = anticipatory information
   - 3 = personal advice
   - 4 = counselling
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Concerns of parents and need for support

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- Somatic health
- Language, cognitive development
- Emotional development
- Behaviour of the child
- Parenting approach
- Living environment
- Social contacts / informal support
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Overview of the studies

- Development: N=1140

- Comparison: 3 groups
  - Home visit with SPARK (N=2243)
  - Well-baby clinic with SPARK (N=2238)
  - Well-baby clinic without SPARK (N=2200)

- Validation (N=2012 from RCT-group) + follow up 1.5 years after the SPARK
Assessment of parenting and developmental problems in toddlers: development and feasibility of a structured interview

- Iterative development in close cooperation with CHC nurses: repeated try-out and adaptation

- SPARK provides relevant information about problems experienced and care needs, which can immediately be put to use
• High response rate, selective non-reporting
  - SPARK 92.1% - Self-report questionnaires 66.9%

• Inter-rater reliability good to excellent
  - ICC between 0.85 and 1.0 for physical topics, between 0.61 and 0.8 for social-emotional topics
  - 0.92 for the overall risk assessment

• Convergent validity low, but pattern as expected
  - all correlations ≤0.3

• Discriminative validity was good
  - significant differences in overall risk assessment and parental concerns
• The overall risk assessment of the SPARK was the strongest predictor for child abuse in the 1.5 years after completing the SPARK (odds ratio of high versus low risk: 16.3)
Using the SPARK at home identified significantly more high-risk children compared to clinic visits (3.7 vs. 2.6%) and fewer children with increased risk (19.1 vs. 20.7%; overall p=0.028)
Professionals with usual care visits found less children with high (1.2 vs. 2.6%) or increased risk (14.5 vs. 20.7%) than in visits with the SPARK (p=0.002)
Results trial

Risico-inschatting

Percentage

- laag
- verhoogd
- hoog

regulier CB
verlengd CB
HB
Results trial

Risico-inschatting

p=0.002
Results trial

Risico-inschatting

p=0.028
Key findings SPARK18

- Valid and reliable
- Suitable for the combined task of early problem detection and assessment of care needs of parents
- Reduces differences between CHC professionals
- Improves early detection of parenting and/or child-developmental problems
Any questions?
• Does the SPARK fit in another context outside the Netherlands?