ELSEVIER

Contents lists available at ScienceDirect

## Preventive Medicine

journal homepage: www.elsevier.com/locate/ypmed



## Early detection of parenting and developmental problems in toddlers: A randomized trial of home visits versus well-baby clinic visits in the Netherlands



Ingrid I.E. Staal <sup>a,b</sup>, Henk F. van Stel <sup>b,\*</sup>, Jo M.A. Hermanns <sup>c</sup>, Augustinus J.P. Schrijvers <sup>b</sup>

- <sup>a</sup> Department of Preventive Child Health Care, Municipal Health Service Zeeland, Goes, The Netherlands
- <sup>b</sup> Julius Center for Health Sciences and Primary Care, University Medical Center Utrecht, Utrecht, The Netherlands
- <sup>c</sup> Faculty of Social and Behavioural Sciences, University of Amsterdam, Amsterdam, The Netherlands

#### ARTICLE INFO

Available online 12 September 2015

Keywords: Child Health Care Well-baby clinic Home visiting Prevention

#### ABSTRACT

*Objective.* The early detection of parenting and developmental problems by preventive child health care (CHC) services in the Netherlands takes place almost exclusively at the well-baby clinic. This study assesses whether, compared to a visit to the well-baby clinic, a home visit improves early detection.

Methods. 4481 eligible 18-month-old children and their parents were randomized to either a visit to the well-baby clinic or a home visit in the period from December 2006 to January 2008. A CHC nurse held structured interviews using the validated Structured Problem Analysis of Raising Kids (SPARK). Differences in the percentage of children with high or increased risks of parenting and developmental problems as assessed by the SPARK were analyzed with ordinal regression. Secondary outcomes included the percentage of parents attending, parents' concerns, needs assessment by parents and CHC professionals and user experience.

Results. Response rates were 94.0% for the home visit group and 93.2% for the well-baby clinic group. 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). Home visits more often involved both parents and other children. At home, parents reported more concerns. Both parents and CHC nurses more often expressed the need for support and reported significantly better experiences at home.

Conclusions. Aided by a validated structured interview, CHC professionals detect more children with high risks of parenting and child-developmental problems during home visits than during clinic visits. Clinical Trial Registration: www.trialregister.nl Identifier: NTR1413

© 2015 Elsevier Inc. All rights reserved.

## **Background and aims**

An estimated 10–25% of children below the age of four experience varying degrees of problems related to parenting and/or psycho-social development (Bricker, et al., 2004; Briggs-Gowan, et al., 2004; Carter, et al., 2004; Reijneveld, et al., 2004; Staal, et al., 2011). This requires serious attention; the sooner an intervention takes place, the more effective it will be (Carneiro and Heckman, 2003; Hermanns, et al., 2005; Zerhouni, 2008). Early intervention should be based on accurate detection and suited to the problem identified (Committee on Psychosocial Aspects of Child

and Family Health and Task Force on Mental Health, 2009). For the early detection of parenting problems and developmental problems in young children, preventive child and youth health care (CHC) services offer an excellent environment: contact with these services is standard practice for young families in the Netherlands—families are automatically registered and services are highly accessible (Glascoe and Marks, 2011; Hoppenbrouwers, et al., 2010; Shuller, et al., 2004; Squires, et al., 2005).

To facilitate the early detection of parenting problems and developmental problems in young children, we recently developed and validated a structured interview: the Structured Problem Analysis of Raising Kids (SPARK) (Staal, et al., 2011; Staal, et al., 2013; van Stel, et al., 2012). It is aimed to promote shared decisions about further care made by parents and CHC professionals. The SPARK was developed in close collaboration with CHC nurses. This process and first results have been described in a previous publication (Staal, et al., 2011). The SPARK has proven to be a feasible and reliable instrument, with effective discriminative and predictive validity (Staal, et al., 2013; van Stel, et al., 2012).

In the Netherlands, early detection of parenting and developmental problems in CHC almost exclusively takes place at the well-baby clinic.

Abbreviations: ARCAN, Advice and Reporting Centers for Child Abuse and Neglect; CHC, Child Health Care; ITT, intention-to-treat; RCT, Randomized Controlled Trial; SPARK, Structured Problem Analysis of Raising Kids; YCA, Youth Care Agency.

<sup>\*</sup> Corresponding author at: Julius Center for Health Sciences and Primary Care, University Medical Center Utrecht, HP: Str. 6.131, PO Box 85500, 3508 GA Utrecht, The Netherlands

*E-mail addresses*: ingrid.staal@ggdzeeland.nl (I.I.E. Staal), h.vanstel@umcutrecht.nl (H.F. van Stel), jhermanns@hsconsult.nl (J.M.A. Hermanns), mail@guusschrijvers.nl (A.J.P. Schrijvers).

However, it is debated whether this is the best place; home visits may be more effective for early detection of parenting and developmental problems (Burgmeijer and Rijcken, 2001; Staal, et al., 2005). Assumed advantages of home visits are that more and better information may be obtained about a family's situation and housing conditions and about the interaction between child and parent(s), that more parents may attend and that parents and children may be 'more at ease', as they remain in their own familiar environment. However, evidence about the added value of home visits is lacking (Burgmeijer and Rijcken, 2001). During the past decades, home visits have been introduced and scaled down several times, so scientific evidence is needed to inform policy makers on this topic. This study addresses the question whether, compared to a visit to the well-baby clinic, a home visit improves the early detection of parenting problems and developmental problems in young children. To establish this, validated interviews were held on both locations. We also assessed user experience reported by parents as well as CHC professionals on both locations.

#### Methods

### Design

We set up a non-blinded trial in which 18-month-old children were randomized for either a visit to the well-baby clinic or a home visit. All children living in the Dutch province of Zeeland in the period from December 2006 to January 2008 were eligible for participation. Once a month, the municipal population register was consulted to identify all children who would reach the age of 18 months in the following month.

A practice assistant entered the children in a secured online randomization module provided by the Data Management Department of the Julius Center for Health Sciences, University Medical Center Utrecht. This module automatically randomized the children for a home visit or a well-baby clinic visit, stratified on CHC nurse (Fig. 1). Randomization results were communicated to the CHC nurses and the research team. The CHC nurse contacted parents for their child's regular check-up at 18 months and included an information letter explaining the aim of the visit and the study. For both locations (home and clinic), time available for the SPARK was 30 min.

Visits started with the SPARK, with the primary goal of assessing parents' concerns and deciding together which care was needed by the child and its parent(s). Interviews were followed by a request for informed consent to use recorded information for scientific research. This specific order of events was a deliberate choice; it could have been uneasy for the parents and the CHC nurse to discuss parents' concerns and necessary care after informed consent had been denied. As the situation concerned a regular visit that required active participation by parents and CHC nurse, blinding was impossible. The Medical Ethical Review Committee of the University Medical Center Utrecht gave a positive advice for this study, including the consent procedure (protocol number 06-290/C dated October 31, 2006). The study was registered at the Netherlands Trial Register (http://www.trialregister.nl), NTR1413.

The research team recorded all deviations from the randomization schedule, and nurses were asked to explain deviations. To ensure maximum response, parents who had not responded to the initial invitation were contacted via a

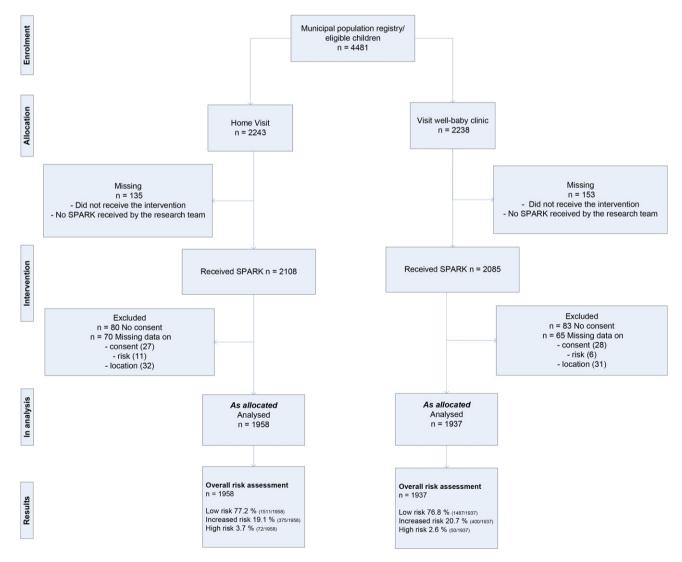


Fig. 1. Flow diagram of a randomized trial of home visit versus well-baby clinic visits in the Netherlands: Early detection of parenting and developmental problems in toddlers.

## Download English Version:

# https://daneshyari.com/en/article/6046434

Download Persian Version:

https://daneshyari.com/article/6046434

<u>Daneshyari.com</u>