Mothers' and fathers' mental health, newborn social behaviour, and parent-infant interaction in West Kiang, The Gambia

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Measuring infant development

An infant wearing an fNIRS cap for brain imaging

A newborn engaging in face to face interaction with C. Bartram

Introduction

The first two years of an infant's life are a time of rapid cognitive, social, psychological and physical development.

The aim of this study is to assess associations amongst psychosocial aspects of infant development (below), and infant weight and height.

Parents' mental health

Newborn interactive behavior

Caregiver-infant interactions

Family socioeconomic status

The data comes from Brain Imaging for Global Health (BRIGHT) study, which follows infants in The Gambia and the UK from the third trimester to 2 years, to develop brain-function-for-age curves. This study includes a sub-sample of mothers, fathers and infants enrolled in the study in West Kiang (WK).

Pilot Research Questions

Explored the context and adapted measures

- What is it like to parent a newborn in WK?

- How do parents in WK perceive their newborns' social behaviour?

- Is the Neonatal Behavioral Assessment Scale (NBAS) culturally acceptable?

- Can mental health questionnaires (MHQ's), not previously used in WK, be translated into Mandinka and adapted for the context?

Main Study Questions

Understanding relationships amongst physical growth and psycho-social data
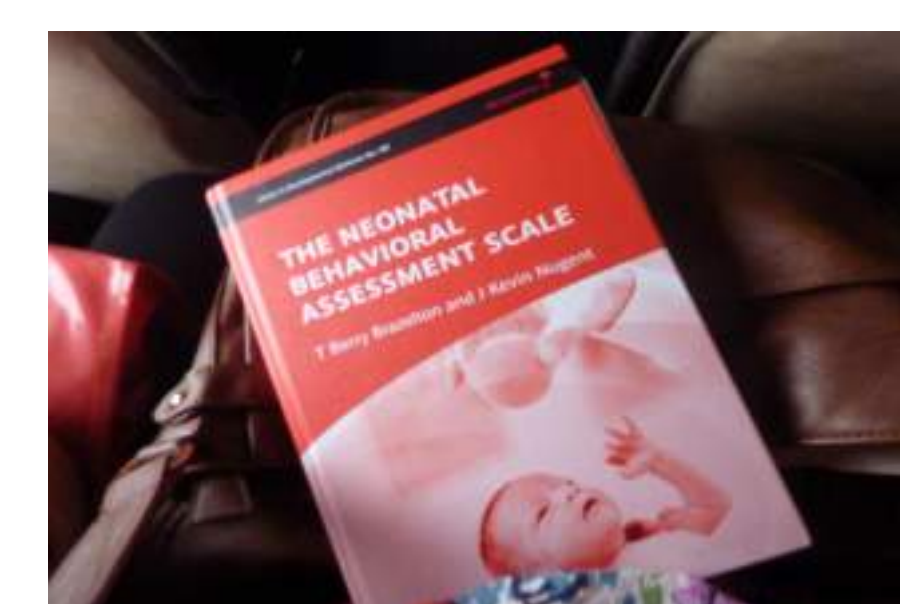
Questions include

- Does mothers' mental health before birth predict infant birth weight?

- Does fathers' mental health in the first month after birth predict how he interacts with his infant?

- Does newborn social behaviour predict infant weight and height at one month?

- Is caregiver-infant interaction quality predicted by village, or family socio-economic status?

Main Study Data Collection

Recruitment for the BRIGHT study began in June 2016 and will include 200 infants and their parents. Infants are followed up to 2 years of age. For this study, a subset are followed up to 5 months.

Visit	Variable
Antenatal	Parents' mental health
	Family SES
Birth	Infant weight, height
7-14 days	Newborn behaviour
1 month	Parents' mental health
	Parent-child interaction
	Infant weight, height
5 months	Parents' mental health
	Parent-child interaction
	Infant weight, height

Spotlight on the NBAS

NBAS manual and two items

Conducting NBAS's in WK (above) and UK (below)

Preliminary Pilot Data

Caregiver interviews

Interviews with 30 mothers, fathers, and community members are being analysed. They covered:

Daily caregiving experiences

Understanding newborn behavior

Goals and concerns for children

NBAS acceptability and adaptation

The NBAS was piloted with 15 families in July 2015 (SCC 1413v2) Interviews with the infants' parents and elders reported the NBAS as acceptable.

Translating MHQ's

Five questionnaires were translated into Mandinka, November 2015--April 2016:

Edinburgh Postnatal Depression Scale

Perceived Stress Scale

Pregnancy-Related Anxiety Scale

Pregnancy-Specific Anxiety measure

Positive and Negative Affect Scale

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