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THE EFFECT OF DEVELOPMENTAL ACTIVITIES, EMBEDDED INTO PARENT'S ACTIVITIES OF DAILY LIVING, ON SUPINE SLEEPING INFANT MILESTONE DEVELOPMENT

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A research report submitted to the Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, in partial fulfilment of the requirements of the Master of Science Degree in Occupational Therapy.

Johannesburg, 2011

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DECLARATION

I declare that this dissertation is my own work. It is being submitted for the degree of Masters of Science in Occupational Therapy at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at this or any other University.

Beverley Hewson

_____, _____day of

_____2011

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ABSTRACT

Therapeutic intervention should take humans' daily routines into account or it is unlikely to be assimilated into everyday practice. This is particularly true for the mothers of young children. The purpose of this study was to examine the effect of a prone postural control programme, by inserting infant stimulation activities in to the activities of daily living of mothers.

30 mother-infant dyads were randomly assigned at eight weeks postpartum, to an intervention or usual care group. Following a four month period in which the intervention group followed a prone activity programme developed by the researcher, the infants were reassessed. The Peabody Developmental Motor Scales (2nd Ed) were used to evaluate the programme's efficacy and the results demonstrate a significant difference ($p \leq 0.00$) in the total motor development between the two groups post intervention. Thus a 'prone playing' programme given to mitigate developmental delay associated with supine sleeping, was successful when embedded into the mother's daily routine.

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DEFINITIONS OF TERMS:

- **Activities of Daily Living** – "are tasks of self-maintenance, mobility, communication, home management and community living that enable an individual to achieve personal independence."[1 p 463] For the purpose of this study, the activities of daily living pertaining to mothering include, but are not restricted to, baby care, home management and those work, leisure, social and personal management tasks which may have been applicable prior to the infant's birth.

- **Occupationally-embedded exercise** – are exercises that are inserted/incorporated in everyday tasks that are occupationally appropriate for the individual and provide meaning and motivation other than the achievement of exercise,[2] such that the "exercise occurs as a byproduct of pursuing task-specific goals."[3 p 27]

- **Sleep position -** The position in which parents place their infants to sleep during the day and night.[4] This may include prone, supine or side-lying positions, or a combination thereof.[5]

- **Sudden Infant Death Syndrome –** "The sudden death of an infant under one year of age, which remains unexplained after a thorough case investigation, including performance of a complete autopsy, examination of the death scene and review of the clinical history."[6 p 681]

- **Programme development** - "Creating and evaluating an approach to service delivery for a defined client group."[7 p 491]

- **Mechanism of change -** "Theoretically and empirically accounting for how a particular change occurs as a consequence of participating in an intervention."[7 p 493]

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- **Tummy time –** is a conversational term, used to explain to parents the prone positioning of an infant when they are awake, but supervised, to encourage development of muscles of the head and neck and shoulders.[8, 9]

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ABBREVIATIONS:

AAP: American Academy of Pediatrics

ADL: Activities of Daily Living

AIMS: Alberta Infant Motor Scale

AP: Activity Profiles

BTS: "Back to Sleep"

FMQ: Fine Motor Quotient

GMQ: Gross Motor Quotient

IPCP: Infant Postural Control Programme

PDMS-2: Peabody Developmental Motor Scales – 2nd Editions

SIDS: Sudden Infant Death Syndrome

TMQ: Total Motor Quotient

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