



**FEEDING PRACTICES AND NUTRITIONAL STATUS OF
CHILDREN (AGED 0 TO 3 YEARS) IN TWO CLINICS IN THE
MORETELE DISTRICT**

by

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ABSTRACT

The research was undertaken to obtain baseline data on the nutritional status and feeding practices of two rural communities. Two health care clinics (Makapanstad and Mathibestad) in the Moretele District north of Pretoria were identified. Children (0-36 months) visiting the baby clinic with their mothers / caregivers were targeted. The exploratory investigation can be described as cross sectional, prospective and descriptive in the qualitative and quantitative research domains. This study aimed to examine, explore and describe the nutritional status (anthropometry, dietary intake) and feeding practices (food intake / security, knowledge, attitude) of the studied children and to determine if malnutrition existed in these communities.

The technique of convenience sampling was used to draw the sample. The sample was compiled from mothers / caregivers with children (six age categories) that visited the baby clinic on a Tuesday morning in both areas. The research was conducted from September 1995 to March 1996. Two interviewers (one per clinic) of the same ethnic group were used to overcome cultural, literacy and language problems associated with cross-cultural research. Individual interviews, using structured questionnaires (biographic questionnaire, hunger scale (48) and a 24h-recall) and anthropometry were done in the quantitative research domain and structured focus group interviews in the qualitative research domain. Descriptive and inferential statistics were used on the quantitative data and content analysis and ethnography on the qualitative data. Systematic coding of data as part of the content analysis produced numerical descriptions. Ethnography provided descriptive data / results.

Quantitative results revealed that the children in both areas grew according to their birth percentiles, but all showed an abnormal growth pattern between the ages of 12-24 months. The nutritional evaluation, using two sets of standards [WHO and RDA ($\frac{2}{3}$ cut off) reference values], revealed that iron, calcium and zinc intakes were low. Though the protein and kilojoule intakes were sufficient, it was only marginally so. The hunger scale measurements revealed that the subjects from the Makapanstad and Mathibestad areas perceived themselves as food insecure (58% and 25% respectively).

Qualitative results revealed that breast feeding was the choice feeding for newborn babies. Bottle feeding was only given where breast feeding was physiologically / clinically impossible. Solid food was introduced very early (at two-three months). The reasoning behind the specific sequence for the introduction of solid foods could not successfully be uncovered. The children's diets were nutritionally poorly balanced due to the foods chosen and the limited variety offered in their diets. The mother's / caregiver's nutrition knowledge with regard to specific foods, their functions and recommended quantities, was poor. The women adhered to their cultural beliefs regarding food choices and preparation practices for babies / young weaning-age children. Certain misconceptions were revealed in the discussion on attitudes.

The results provided insight regarding the feeding practices, nutrition knowledge and attitudes, and were used to substantiate recommendations aimed at the improvement of the feeding practices / nutritional status of the children. Education on health care practices and nutrition might positively influence the attitudes and consequently the feeding practices.

KEY WORDS: nutritional status, dietary adequacy, anthropometry, feeding practices, breast feeding, bottle feeding, weaning, nutrition knowledge, attitudes, food security, content analysis, ethnography

SAMEVATTING

Hierdie navorsing is onderneem om basislyndata oor die voedingstatus en die voedingpraktyke van twee landelike gemeenskappe te bekom. Twee gesondheidsorgklinieke (Makapanstad en Mathibestad) in die Moretele Distrik, noord van Pretoria, is geïdentifiseer. Die teikengroep was kinders (0-36 maande) wat die babakliniek met hul moeders / versorgers besoek het. Hierdie verkennende ondersoek kan beskryf word as 'n dwarsnee, prospektiewe, beskrywende ondersoek in die kwantitatiewe- en kwalitatiewe navorsingsdomeine. Die studie het ten doel gehad om die voedingstatus (antropometrie, dieetinname) en die voedingpraktyke (voedselinname / -sekuriteit, voedingkennis en houding) van die bestudeerde kinders te ondersoek, te verken te beskryf, asook om te bepaal of wanvoeding in hierdie gemeenskappe voorkom.

Die tegniek van geriefsteekproeftrekking is gebruik om die steekproef saam te stel. Die steekproef is saamgestel uit moeders / versorgers met kinders (ses ouderdomsgroepe) wat die babakliniek op Dinsdagoggende in beide areas besoek het. Die navorsing is uitgevoer vanaf September 1995 tot Maart 1996. Twee onderhoudvoerders (een per kliniek) van dieselfde etniese groep is gebruik om die kulturele-, taal- en geletterdheidsprobleme, wat met kruis-kulturele navorsing geassosieer word, te oorkom. Individuele onderhoude wat gestruktureerde vraelyste (biografiese vraelys, hongerskaal (48), 24h-herroep) en antropometrie ingesluit het, is in die kwantitatiewe navorsingsdomein gedoen en 'n gestruktureerde fokusgroeponderhoud in die kwalitatiewe navorsingsdomein. Beskrywende en inferensiële statistiek is op die kwantitatiewe data gebruik en inhoudsanalise en etnografie op die kwalitatiewe data. Sistematiese kodering van die data as deel van die inhoudsanalise het numeriese beskrywings gelewer. Etnografie het beskrywende data / resultate gelewer.

Die kwantitatiewe resultate het getoon dat die kinders in beide areas volgens hul geboortepersentiele gegroei het, maar almal het 'n abnormale groeipatroon tussen die ouderdomme van 12-24 maande getoon. Die nutrisionele evaluasie, gedoen met twee stelselstandaarde [WHO en RDA ($\frac{2}{3}$ afsnypunt) verwysingswaardes], het getoon dat die yster-, kalsium- en sinkinname laag was. Alhoewel die proteïen- en kilojouleinname voldoende was, was dit marginaal. Die hongerskaalmetings het getoon dat die proefpersone van die Makapanstad- en Mathibestadareas hulself as voedselonseker beskou het (58% en 25% respektiewelik).

Die kwalitatiewe resultate het getoon dat borsvoeding as keusevoeding vir pasgebore babas beskou is. Bottelvoeding is alleenlik gegee waar borsvoeding fisiologies / klinies onmoontlik was. Vaste voedsel is baie vroeg reeds (teen twee tot drie maande) in die dieet ingesluit. Die redes vir die bepaalde volgorde van insluiting van vaste voedsel kon nie suksesvol vasgestel word nie. Die voedingkennis van die moeders / versorgers met betrekking tot spesifieke voedsels, hul funksies en aanbevole hoeveelhede, was swak. Die kinders se diëte was nutrisioneel ongebalanseerd weens die swak voedselkeuses en beperkte verskeidenheid. Die vroue het steeds hul kulturele gewoontes met betrekking tot voedselkeuses en voorbereidingspraktyke vir babas / jong speningsouderdom kinders beoefen. Bepaalde wanopvattinge is in die besprekings oor houding geïdentifiseer.

Die resultate het insig gebied oor die praktyke, kennis en houdings aangaande voeding- en voedingpraktyke en is gebruik om voorstelle gemik op die verbetering van die voedingpraktyke / voedingstatus van die kinders te bewerkstellig. Onderrig oor gesondheidsorgpraktyke en voeding mag die houdings en gevolglik die voedingpraktyke positief beïnvloed.

SLEUTELTERME: voedingstatus, dieettoereikendheid, antropometrie, voedingpraktyke, borsvoeding, bottelvoeding, spening, voedingkennis, houding, voedselsekuriteit, inhoudsanalise, etnografie

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