

**Infant and Young Child Feeding Practices among  
children aged 0-23 months in Tanzania**

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**A thesis submitted for the degree of MPhil (Nutrition and Dietetics)**

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## **Statement of Originality**

This thesis contains no materials which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and. To the best of my knowledge and belief, contains no materials previously published or written by another person, except where due reference has been made in the text. I give consent to this copy of my thesis, when deposited in the University Library, being made available for loan and photocopying subject to the provisions of the Copyright Act 1968.

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Rose Victor

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## **List of abbreviations**

AIDS	Acquired Immunodeficiency Syndrome
AOR	Adjusted Odds Ratios
BF	Breastfeeding
BFHI	Baby- Friendly Hospital Initiative
BMI	Body Mass Index
CF	Complementary Feeding
CI	Confidence Interval
DHS	Demographic and Health Survey
EBF	Exclusive Breastfeeding
HIV	Human Immunodeficiency Virus
IYCF	Infant and Young Child Feeding
MDG	Millennium Development Goals
OECD	Organization for Economic Co-operation and Development
OR	Odds Ratios
ORS	Oral Rehydration Solution
TBA	Traditional Birth Attendant
TDHS	Tanzania Demographic and Health Survey
TRCHS	Tanzania Reproductive and Child Health Survey
UNICEF	United Nations Children's Fund
U.S	United States
UK	United Kingdom
WHO	World Health Organization

## **Abstract**

Inappropriate infant and young child feeding (IYCF) practices are one of the major causes of undernutrition, morbidity and mortality among young children in Tanzania and the risk factors associated with inappropriate IYCF practices remain unclear. This information is therefore, vital to identify those at risk of poor feeding practices and who need to be targeted for interventions to improve IYCF practices in Tanzania. The main objective of this thesis was to describe the prevalence of the new World Health Organization IYCF indicators and identify factors associated with inappropriate breastfeeding and complementary feeding practices among children aged 0-23 months in Tanzania. The thesis also compared the trends of key breastfeeding indicators from 1999 to 2010 and complementary feeding indicators from 2004-05 to 2010. This thesis was a secondary analysis of cross-sectional data from the 1999 Tanzania Reproductive and Child Health Survey, the 2004-05 and 2010 Tanzania Demographic and Health Surveys. These surveys used a multi-stage cluster sample of 3,826 households in 1999, 10,312 in 2004-05 and 10,300 in 2010 from eight geographic zones in Tanzania. The sample consisted of 7,603 infants aged 0-23 months (Chapter 2).

Results from the analysis of breastfeeding data in Chapter 3 showed that breastfeeding is universal in Tanzania as almost all mothers (98%) breastfed their children as reported in the three surveys. However, breastfeeding was initiated within the first hour of birth in 59.0% of mothers in 2004-05 but reduced to 46.1% in 2010. In infants aged 0-5 months the prevalence of exclusive breastfeeding was 31.8% in 1999 and increased to 41.3% in 2004-05 and further improved to 49.9% in 2010. The proportion of infants aged 0-5 months who were “predominantly breastfed” declined from 59.8% in 1999 to 16.8% in 2010. Most mothers (>91.0%) breastfeed up to 1 year in all surveys, but the proportion decreased to 57.2% , 55.5% and 51.1% at 2 years of age in 1999, 2004-05 and 2010 respectively. The most consistent determinants of suboptimal breastfeeding (delayed initiation of breastfeeding within one hour of birth; non-exclusive breastfeeding and predominant breastfeeding) included young maternal age

(< 25 years), lower maternal education, maternal employment, home delivery, inadequate care during and after birth and poor economic status.

Chapter 4 presents the findings for the analysis of complementary feeding practices based on data from the 2004-05 and 2010 Tanzania Demographic and Health Surveys because information on complementary feeding practices (i.e. type of foods and frequency of feeding) was not collected in the 1999 survey. It was found that the majority of infants aged 6-8 months were reported to receive soft, semi-solid or solid foods, and the proportion increased from 79.6% in 2004-05 to 92.3% in 2010. However very few children aged 6-23 months met the minimum requirements for indicators for dietary diversity, meal frequency and acceptable diet. The prevalence of minimum dietary diversity showed slight decrease from 39.5% in 2004-05 to 38.0% in 2010, whereas minimum meal frequency and acceptable diet showed significant decline from 45.0% and 18.5% in 2004-05 to 34.7% and 13.4% in 2010 respectively. Lower parental education, poor household economic status, absence of postnatal check-ups after delivery, young child age and rural residence were significant and consistent risk factors associated with inappropriate complementary feeding practices in Tanzania.

Based on the above findings, this thesis concluded that levels of breastfeeding and complementary feeding indicators are below national targets of 80% placing millions of children at risk of childhood malnutrition associated with inappropriate feeding (Chapter 6). Tanzania has made significant improvement regarding feeding indicators such as exclusive breastfeeding under six months, continued breastfeeding up to 1 year and introduction of complementary foods at 6-8 months from 1999 to 2010. However, there was significant decline in the prevalence of the indicators for early initiation of breastfeeding within one hour after birth, continued breastfeeding up to two years, minimum dietary diversity, minimum meal frequency and minimum acceptable diet from 2004-05 to 2010. These findings highlight the need for effective national level nutrition programmes to enhance breastfeeding and complementary feeding practices and with a focus on the target groups with sub-optimal

practices- including young uneducated mothers and carers with young children who lacked postnatal contacts with health workers, those from poor families and residing in the rural areas.