

INFANT FEEDING PRACTICE IN OYO TOWN

IMPLICATION FOR HEALTH EDUCATION

BY

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D E D I C A T I O N

Dedicated to my children Abayomi Olagoke
Olaniyan and Olawale Olumide Olaniyan.

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A B S T R A C T

Malnutrition is very prevalent among the children from age 0-5 years, most especially in the developing countries such as Nigeria. Hence the need to address ourselves to finding ways of overcoming this problem.

The study was aimed at obtaining information on infant feeding practices by mothers in Oyo Town.

The town was first zoned into two i.e. the indigenous areas and the urban transitional areas. Mothers who have had at least two children in succession and are currently breast-feeding constituted the study population. Questionnaires were used to collect data from 203 mothers using simple random sampling technique. The results of the data collected were then compared among respondents in the indigenous and the transitional area.

The findings of the study showed that respondents are within the age of 15-44 years with 30-34 year group forming the greatest percentage. All mothers in the two groups practised breast feeding for varying periods of time. Among the non indigenous group,

which are mostly elites, children are breastfed for 6-10 months and among the indigenous group, for up to two years. The weaning period in both groups was either too early or too late. The use of infant formulae was found to be rapidly gaining ground despite the high cost; 51.0% of the indigenous group and 84.4% of the non indigenous group made use of infant formula to supplement breast milk. In addition, the use of local herbs (Agbo) was still in practice especially among the indigenous mothers. Ordinary pap (Ogi) or mixture of pap and bournvita was used by some mothers as weaning diet.

Based on the findings, it was recommended by the author that nutritional education should be further strengthened at the infant welfare clinics, with emphasis on infant feeding techniques, types of weaning diet, precise weaning age and nutritional requirement of infants at different stages of their growth.

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I am also indebted to Prof. J.D. Adeniyi for his relentless efforts in putting me through whenever his assistance was needed.

I thank my wife for her great contributions. To all my Colleagues, Messrs S.A. Alao, Dipo Ogundare, Mrs. Racheal Olajire Ogungbenro and Miss Yinka Adekola, I say thank you for all their support and useful suggestions.

Finally, my thanks go to Alhaji L.A. Akanmu for typing the manuscript.

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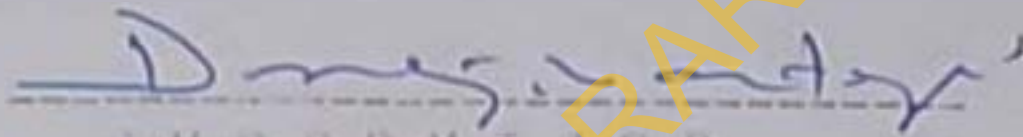
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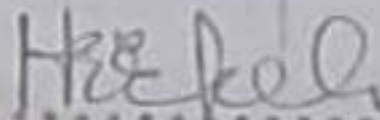
C E R T I F I C A T I O N

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CHAPTER ONE

I N T R O D U C T I O N

Infant Feeding problem and the problem of malnutrition have been a matter of great concern among medical and public health personnel especially in the developing countries of Africa. In this regard age 0-5 years is regarded as critically important because the growth of the child at this period is essentially linked with the quality and quantity of food. Secondly, the foundation for life long effect of inadequate nutrition is laid especially when a child is underfed at this stage of life.

According to Waterlow (1987) in many third world countries 30.0% or more of the children under five years may be diagnosed as malnourished solely on the basis of low height or weight for age in comparison with international standards. By definition, malnutrition is regarded as the outcome of a deficient intake of energy or of a particular nutrient in the diet. Deficiency or nutrient singly or in combination can produce nutritional deficiency diseases.

Since nutrition and health are inextricably interwoven and there is no doubt about the role of nutrition in the physical and mental development of children. Malnutrition is the most prevalent illness of infants and children in the developing world (Gbadero, 1989). Malnutrition is more common during weaning period because of the inadequacy of breastmilk to meet the child's nutritional requirements, especially between age 4-6 months of life, (Espgans 1984 and Ramachandra 1988). It has been ascertained that in the first two years of a child's life, 90% of human brain cells develop when a child is inadequately fed, (Brown 1965 and Winick, 1970). Osama (1983) was of the view that the retardation in both mental and physical growth consequent upon malnutrition may be disadvantageous to a nations economic development.

In view of this, there is an urgent need to give priority to the nutritional aspect of health care delivery. This can not be easily achieved unless a high level of awareness is created about existing nutritional problems of children, through nutritional education. However, before this is done, the first logical activity is the investigation of the feeding

patterns and practices of the people especially the infants who are more vulnerable. Such investigations can reveal what type of foods infants eat, how the food items are capable of meeting the nutritional needs of the infants, what the socio-cultural practices to inadequate feeding of infants are and what types of nutritional diseases that are most prevalent. Appropriate answers to these questions can provide interventions that can help reduce the existing nutritional problems in Oyo town and any other community.

MAGNITUDE OF THE PROBLEM

It has been reported that more than half of the world population suffer from malnutrition and about 3.0% of all children under the age of five years in Asia suffer from severe protein energy malnutrition (Gbadero, 1989). In African countries, malnutrition is the direct cause of mortality in 9.0% of deaths of children aged one to four years and a major underlying cause in an additional 48.0% Gbadero (1989). According to the Agency for International Development, AID (1985) about fourteen to fifteen millions of the third world children die of diseases and malnutrition before they reach the age of five. This can be attributed to many

factors such as faulty feeding habits and the declining breast feeding practices. Other factors include:-

1. Migration of families from rural to urban areas, with more women working in settings not supportive of breast feeding and the emergence of the feeding bottle as a status symbol.
2. Practices in health care facilities which discourage breastfeeding such as separating mother and baby, routine bottle feeding, delay in establishment of breastfeeding.
3. Inappropriate advertising and promotion of infant feeding products which in turn reinforce other causes.

In a Nutrition Survey carried out in Nigeria by the interdepartmental Committee on Nutrition for National Defence (ICNND) in 1965, there was a reported prevalence of mild to moderate degree of protein energy malnutrition (PEM). The breakdown showed 1.6% as marasmus and 1.6% kwashiorkor cases among the children examined.

Nutrition problems in Nigeria constitute a significant public health problem resulting in unacceptable high morbidity and mortality especially among the infants and under two children.

5.

It has been observed that the impact of the structural adjustment policy of the Nigerian government on the growing child is so much that a lot of children failed to thrive because of gross inadequacy in their daily diet (Opawoye, 1989). For instance, in Oyo State Hospital Oyo, 20.0% of the total Paediatric admissions between 1987 - 1990 were malnutrition cases (State Hospital Medical Records Oyo, 1990). At the Primary Health Centre, Ilora near Oyo, 40.0% of the total children attending the infant welfare clinic/nutrition clinic had moderate to severe degree of malnutrition in 1989, while 15.0% of the total children admission in the same Centre for the year 1990 were malnutrition cases.

Before the Structural Adjustment Programme (SAP) of the Federal Government of Nigeria, the supply of processed milk suitable for feeding young children were readily available, and it was within the financial capability of many parents then. However since the beginning of the Structural Adjustment Programme, there has been persistent increase in the prices of these processed milk products. This makes it more and more expensive beyond the financial capability of the parents.

The children were either fed infrequently with breast-milk or breastmilk and other local food materials with low nutrient value.

Over the years there has been an increasing change in the life style of the people, as a result of urbanization. Thus many women in Nigeria now go to work and have less time to care and adequately feed their children. Additionally there is less opportunity nowadays for young women to learn from older rearing, and especially the habit of prolonged breast feeding.

The focus of this study was generated from personal experience of the author in which a lot of malnourished children were observed among breastfed children of friends' family members and among children brought to the Infant Welfare Clinic at Ilora Primary Health Centre and Paediatrics Unit, State Hospital, Oyo.

It is quite obvious that in Nigeria there is evidence of widespread undernutrition and malnutrition among children, Ogburn, (1968) in a study done at Massey Street Children Hospital in Lagos found out that malnutrition was a third leading cause of death among

the children. He reported that 19.6% of the total admissions in children was due to malnutrition. Protein energy malnutrition (PEM) usually present itself in two forms;

- (i) Kwashiorkor - indicating deficiency in protein quality and quantity with associated signs of failure to thrive, oedema, muscle wasting and retention of subcutaneous fat, hepatomegaly, dyspigmentation of hair and skin with psychomotor changes (Davidson and Passmore 1975). Kwashiorkor is common during the second year of life when the child must have been weaned off the breast.
- (ii) Marasmus - there is gross inadequacy of both energy and protein intake. This results from inadequate breastmilk intake and overdiluted baby food. Contributory factors include diseases such as gastroenteritis, parasitic infections and others which can interfere with the child's feeding. When a child is solely breastfed for too long a time marasmic condition can set in; (Davidson and Passmore (1975).

As a result of many dietary and health surveys carried out in different parts of Nigeria, facts have been established that both malnutrition and under-

nutrition exist. This situation has been attributed possibly to the present poor economic situation in the country. Baby food is very expensive and many nursing mothers lack adequate knowledge on how local food materials can be utilized to supply the essential nutrients at relatively low cost for their infants. This lack of knowledge and skills have resulted in the development of infant malnutrition; these cases are often admitted in the hospitals. For instance, 20.0% of the total children admission at the State Hospital Oyo in 1987 - 90 were malnourished. Therefore for a reduction of malnutrition incidence calls for proper understanding of the aetiology and factors which influence feeding practices of infants. Nutrition education is important in correcting these types of problems. Lack of nutrition education can be considered as the most important factor militating against good infant/children nutrition. Most mothers are not well informed about the importance of and choice of diets for their infants and other children. Consequently this can lead to bad feeding habits of these children. Shamma (1986) in a paper presented

at the University of Garhwal, India, considered both illiterate and educated people in India to be ignorant of proper nutrition education. The situation appears to exist in Nigeria. For example the weaning period has for long been a controversial issue (even among medical personnels) as there is no concrete agreement concerning the precise age for weaning. Weaning is done in most cases too early or later than 4-6 months, this results in inadequate intake of required nutrients. In most cases the weaning is prepared in unhygienic conditions, and the infant formula is often overdiluted.

Alakija (1980) had observed that clean bottled and correct formula strength were very impossible under African living condition. This statement shows the effect of ignorance as one of the causative factors of malnutrition in developing countries especially in Nigeria and thus the need to identify knowledge of mothers. The practice of forced feeding is still rampant in many communities and this may easily lead to choking, therefore mothers need to be well educated so as to improve on their infant feeding habit.

Hence the need for comprehensive nutrition education of mothers at various primary health care centres and other health institutions. In many instances health personnel do not know how to disseminate simple and effective nutrition education especially when giving health talks to pregnant and lactating women with appropriate demonstrative activities.

The focus of this study was generated by the author's observation of the high rate of malnutrition among the breastfed children including those brought to the Infant Welfare Clinic at Ilora Primary Health Centre and Paediatric Unit, State Hospital, Oyo. This study is therefore vital to such educational activity as it can identify knowledge gaps and skills and negative attitude in respect to infant feeding practices. On the basis of information gained, it will identify strategies which hold promise for bringing about the desired infant feeding practice at a reasonable cost. The study then attempts to collect information on many variables relating to infant feeding practices, such as breastfeeding habit, weaning practice and the socio-economic status of the respondents in relation to the feeding habits

and weaning practice. Such important endeavour can aid the identification of appropriate nutrition education intervention approaches.

SCOPE OF THE STUDY

The study is limited to the assessment of the state of infant feeding practices in Oyo Town. It focuses on health related behaviour of mothers concerning their children's feeding habits. The study is also confined to assessing the level of breast feeding, extent to which infant formula is used to supplement breast milk, weaning habits, types of food materials used for weaning and common age for weaning in the community. This chapter serves an introduction to the research problem, chapter two reviews literature on infant feeding practices in Nigeria and other parts of the world. Chapter three discusses the methodology of the study including the description of the study area, the research design, sampling techniques, study instrument and procedure for data collection and analysis. Chapter four gives with tables the results of the study and the discussion of the results are presented in chapter five.

LITERATURE REVIEW

This chapter presents the current trend of infant feeding, focusing on breastfeeding practice and the changing trend, mothers' knowledge and attitude about weaning practice.

THE CURRENT TREND IN INFANT FEEDING

Infant feeding can be defined as the administration of food materials to infants and the method use in the feeding process. Infant feeds may consist of breastmilk and other food materials both regarded as complementary or supplementary depending on individual interpretation.

The types of feeding are:-

- | | |
|---------------------------|--------------------|
| (a) Breastfeeding | (b) Bottle feeding |
| (c) Cup and spoon feeding | (d) force feeding |

Breast Feeding

This is the act of giving human breastmilk as food to babies, and it is a world wide practice. Human milk is still a reality in most of the developing world as reported (Smalou, 1975). Feeding infants with breastmilk is not only natural and sensible but it

is one of the safest ways to feed infants. Karima et al (1989) described breastmilk as a life saver.

Type:- There are two types of breast feeding.

(a) Unrestricted Type

This is a process by which breastmilk is offered to children anytime anywhere. There is no time limit, and the child is offered breast anytime he or she cries regardless of whether he/she is hungry or not. Whenever the child cries the mother always has the belief that the child is hungry. This has been observed to an ancient phenomenon and it is still practised mostly by the non elites.

(b) Restricted/Token Breastfeeding

In this type, there is usually a scheduled time for breastfeeding. This type of breastfeeding is often associated with complementary feeds in which the child is fed intermittently with other babyfood, most commonly the infant formula.

Omololu, (1975) observed that the incidence of breastfeeding is still 100% in the rural areas of Nigeria. It is however a matter of serious concern

that breastfeeding practice is no more given the desired attention especially in the urban cities, due to adoption of western civilisation with the convenience of bottlefeeding. Fernando, (1987) reported that, by favouring modernization, urban environment has been fertile ground for the promotion of bottle feeding at the expense of maternal lactation, particularly among household where demand of urban cities impose various limitations on adequate breastfeeding. Many mothers find it easy to leave the care of their child feed to the hands of house-helps and old parents or neighbours to go for government job and other private business.

Breastfeeding and the Changing trend

The act of breastfeeding is more than the supply of nutrients, it is rather a biological communication between mother and children . However, breastfeeding practices is rapidly declining in many countries including Nigeria, probably due to technological advancements and other social factors, For instance the emergence of feeding bottle as a status symbol, practices in health care facilities which discourage mothers and baby to stay in a place, routine bottle-

feeding, delay in introducing the baby to the breast are all detrimental to the smooth breastfeeding practice. In addition, inappropriate advertising and promotion of artificial infant feeding products, in turn reinforce other causes. Sausa, (1975) claimed that unsuitable commercial advertisement of infant formula was one of the most powerful persistent factors causing fall in the incidence of breastfeeding, while over-sweetening of artificial milk and easier suckling of bottle teat were underlying causes that are being gradually ignored.

Tieh (1981) studied the breastfeeding pattern of Chinese women in four countries and reported that the trend was falling especially among the English educated elites. Although these women were given maternity leave with pay, breastfeeding allowances and jobs near their houses, it was observed that this did not arrest the falling trend in the duration of breast-feeding.

Tieh (1981) quoting Wrong noticed a dramatic fall in the incidence of breast-feeding in Singapore and the fall was found to be more pronounced among the poor. Among Hong Kong women living in Glasgow only 2.0% breast-fed as compared with 87.0% in Hong Kong.

In Edinburgh kirk, (1980), reported that some form of encouragement to mothers can produce positive results. This statement was made from the observation of a study done to evaluate the effectiveness of nutrition education in infant feeding. She noted that, in 1974, the department of Health and Social Security recommended ways to improve infant feeding and these include the need for;-

- (i) Mothers to breast-feed for a minimum of two weeks and preferably the first 4-6 months of life.
- (ii) That the manufacturers of infant formula to put directions of such products and that such products be well constituted according to the directions, will approximate human milk as much as possible.
- (iii) Mothers to delay introduction of solid foods for at least 4 months and
- (iv) mothers to avoid adding salt and sugar to baby foods.

The effect of these recommendations was assessed using a sample size of 200 women in Edinburgh, Scotland between 1976-77. According to Kirk, there were improvements especially among the middle class mothers between 1974 - 1975; 44.0% of the study population breastfed only at birth, 29.0% for two weeks, while 100% breastfed for four months. Between 1976 to 1977 it was reported that 68.0% breastfed only at birth, 49.0% for two weeks and 37.0% for four months. These reports correspond to those of Martinez, 1979 who reviewed the results of surveys made from 1955 to 1979. He reported that the incidence of breastfeeding practices has risen in the United States of America, especially among the women with some college education and higher family income.

El-Mougi, (1981) concluded that education had a strong negative influence on duration and incidence of breastfeeding. Similar results were found in Lebanon by Zurnyle, (1981) using 1004 mothers in his study.

Jolliffe, (1978) reported that the incidence of breastfeeding among the Yorubas in Nigeria was nearly 100%, the duration of breast-feeding was 24-36 months.

The author further reported that 'Agbomo' a native

concoction was fed thrice daily for the first few days of life and the practice confirmed a set back to the otherwise commendable trend in breast-feeding.

Alakija, (1980) studied women among the Binis in Edo and Delta States of Nigeria. Out of the 237 respondents used in his study, 99.0% breastfed, 88.6% started bottle-feeding in the first month of life, 6.8% gave breast-milk alone to their infants, while 0.8% gave bottle feeds alone. In another study Osei, (1980) examined the relationship between some malnutrition problems and child feeding practices in Ibadan. Using 208 clinic respondents at the University College Hospital, Ibadan, she reported that 14.0% gave supplementary foods before 4-6 months of age, and at 7-9 months 45.0% gave foods other than breast-milk. She further found that at 10-12 months infants were given supplementary foods including fish and meat by all respondents. Some of the children were still being breastfed for 10-12 months. It can then be assumed that bad weaning practice is one of the major factors responsible for malnutrition problems among the children.

According to Jellife et al (1985) the present trend of breast-feeding can also be attributed to Socio-economic

development, rapid urbanization and participation of women in the work force, in addition, the promotion of infant foods and the absence of a firm stand in favour of breast-feeding by health professionals.

According to various studies done on human milk, there is variation in the composition of milk from one mother to another, from day to day and especially between early or late in the period of suckling. Among nursing mothers, the largest variation occurs in the fat and colostrum content, while other nutrients show much less variation, unless the mother is on a deficient diet, milk from older mothers was less in fat.

In a study done in Guatemala, Hernan et al, (1985) reported that prolonged breast-feeding has been the only means of infant feeding until recently in poor socio-economic group of developing countries, and it is still the most prevalent infant feeding method in the world. Nevertheless there is an obvious trend towards decreased breast-feeding throughout the underdeveloped countries of the world especially in urbanizing areas. This is responsible for high rate of malnutrition, prevalent in these areas. Osuntokun, (1972) in his studies in Ibadan reported, that undernutrition especially protein energy

malnutrition greatly affect the brain and the nervous tissue, and this subsequently affect the cognitive and psychomotor functions.

Duration of Breast-feeding

The length of time for which a child is breast-fed has been found to vary from one community to the other and is also based on socio-economic situation of different groups.

Factors Responsible for duration of Breast-feeding

Many factors have been observed to be responsible for the different duration or length of time for which infants are breastfed e.g.

- (1) Socio-economic factors
- (2) Type of occupation of mother
- (3) Disease condition
- (4) Death of mother
- (5) Age of the mother

It has been reported that mothers from high socio-economic group tend to breast-feed their children for shorter period than those from low socio-economic group, this later group breast-feed from birth to 18 months or more (Olaniyan and Meshinro 1986). This has been attributed to the observation that those from low socio-economic group have less resources to buy artificial milk. Furthermore, the type of work a nursing mother does also affects the length of time by which she will breastfeed. For example female civil servants who are at work between 7.30 a.m. and 1.30 p.m. are likely to wean their children off the breast as soon as possible.

The death of the mother and disease condition of the mother usually result in an abrupt end to breast-feeding. The age of the mother is also an important factor in lactation. As age increases, the tendency for degenerative condition of reproductive organs such as breast is eminent. The cells become more and more less functional resulting in decreasing production of breast-milk to offer (Opawoyo 1989), consequently she may be forced to wean her baby earlier than she would have loved.

Olaniyan and Keshinro, (1986) reported gradual decrease of nutrient and vitamins composition breast-milk as lactation lengthens. So also Lonnerd et al (1986) reported gradual decrease in the concentration of proteins, minerals and vitamins in breastmilk of well nourished mothers from 25-170 days post-partum. An unpublished data from the University of IOWA showed that there is gradual decrease in protein content of breast-milk up to 112 days in prolonged lactation. In a study done in Australia, Ribadeau, (1983) reported that prepartum milk concentration of colostrum remains relatively constant and begins to change within few hours after delivery. The concentration of protein decreases while that of lactose increase and both reach a plateau at about 7-8 days after delivery.

Advantages of Breastmilk Over Artificial Milk

Breastmilk has been found to be more advantageous than artificial milk. According to Hiroshi (1989) breastmilk is a living substance containing many living cells as blood itself *white blood cells. It is very natural and pure and usually comes with built in protection against diseases. It is of benefit to the emotional development of both mother and child, and is also relevant to adult personality development and adjustment to the community later life.

According to subcommittee on Maternal and Infant Nutrition in Developing Countries (1984); breastmilk usually provides the sole source of nutrients during early months of life. While Karima et al (1989) described it as the best food for infants and no rival.

Ginnerkin et al, (1975) quoted Perez, (1971) who studied 200 women in Santiago Chile for 4 months after child birth, he explored the use of prolonged lactation as a birth spacing method. He then reported that the longer the period of lactation, the longer the ovulation period lasted, Ginnerkin, (1975) also reported that prolonged breastfeeding increased birth spacing interval by 15-33%. Hernan, (1985) in a study done in Guatemala reported the existing relationship between breast-feeding and suckling practices to reproductive endocrinology and the social and health consequences for the family and the community of close birth intervals. Lonnerd et al, (1984) reported that protein concentration of breastmilk from a well nourished mother decreases from 25-170 days post-partum.

Breastmilk has also been found to be advantageous over artificial feeding as regards the prevention of arteriosclerosis and obesity in later life which it prevents. Gotherford, (1975) and Fowler, (1976) stated

that artificial feeding tends to cause arteriosclerosis and obesity. Other advantages of breast-feeding including:-

- (i) Strengthening of mother child relationship. Gilber and Fobes, (1978) confirmed that early and prolonged contact between mother and infant is considered necessary for the process of bonding. This is an attribute of the mutual love between the mother and the infant, Hernan, (1985) described it as a psychological benefit of breastmilk.
- (ii) Breastmilk contains fatty acids and calcium that is easily digested, assisting in brain development.
- (iii) The p^H created in breastfed infants stomach favours the growth of non-pathogenic organism (lactobacillus) to thrive (Harfounche, 1981).
- (iv) It is absolutely free from infection since it is supplied sterile. It has also been established that breastfeeding is associated with decrease in the incidence of breast cancer (Harfounche, 1981).

(v) Breastfeeding also helps in the transfer of antibodies contained in the milk from the mother to the child (Harfounche, 1970), thus protecting them from diarrhoea, cough and cold. Hernan, (1985) described breastmilk as an agent of immunological protection. This is why babies fed on breastmilk have fewer illness and are less often malnourished than babies who are less often malnourished than babies who are on other foods. Bottlefeeding is therefore a threat to the lives and health of millions of infants.

Breastmilk is cheaper than any artificial feed, and it is freely supplied, it contains sufficient water for a young baby's needs in hot and very dry climate ; contact, (1989).

However despite these advantages, many mothers lack confidence in their own ability to breastfeed. Many often feel that they do not have enough breastmilk to offer and often give their babies other food or drinks in the first few months of life. According

to Piccino, (1986) human breastmilk is regarded as the optimum source of nutrients for the young infants provided the maternal diet is nutritionally adequate and a sufficient quantity is consumed. Therefore such mothers need to be motivated using health education approach. Adequate knowledge of the mother on the relationship of nutrition and health of the new born is essential. Hence health education should be an important component of antenatal and post-natal care in Nigeria Health Institutions, with emphasis on satisfactory breastfeeding practices.

Vandeplas et al, (1988) suggested an exclusive breast-feeding practice for at least the first four months in newborn to prevent or postpone development of food allergy associated with feeding children with cow's milk formula. In 1978, Jelliffe published a sensitive summary of the many dimensions of the breast-feeding issues in the context of woman's needs, pointing out that the need for governmental help to mothers of young children can not be over emphasized. He stressed that consideration should be given to the benefits accruing to the family and society generally, if the mother is paid to stay home to fulfil her maternal role at this

crucial time of her child's life, and she can resume her working role when the main crisis has ended.

Bottle Feeding

This is the act of feeding baby with artificial feed with the aid of a feeding bottle. Many people regard this practice as foreign and a product of western civilization. The practice is gaining ground in the developing countries of the world. The use of the bottle to give food drinks may be due to various reasons such as:-

- (1) Status Symbol
- (2) Type of work done by mother
- (3) Death of mother
- (4) Mother's lack of confidence in breast feeding.

Status Symbol

Some mothers due to western civilization and the environment in which they live may chose to bottle-feed their infants earlier than necessary. This may also be attributed to the convenience associated with the use of bottle and the family financial strength to purchase infant formula.

Type of Work

Mothers who are engaged in government jobs are expected to be at work between the hours of 7.30 a.m. and 1 p.m. everyday. Since it may not be always easy for them to take their infants along to work, they may have no option than to introduce bottle-feeding early enough to their infants, usually after the expiration of their maternity leave which is almost the first three months of life of their infants.

Death of Mother

This is usually a difficult situation. An infant whose mother is dead is introduced to bottle-feeding immediately, whereas breastmilk from another mother can be of value but it is not commonly given.

In less technically advanced areas of the world more immediate and serious basic difficulties pose barriers to attempts to artificially feed young infants on cow's milk formula. These include lack of money to buy adequate quantity, poor home hygiene (including water shortages, fuel, inadequate feeding utensils, storage facilities etc).

Kahn et al, (1988) was of the opinion that the tendency to get eczema may increase with the number of solid foods given to a child during the first four months of life. In addition, in recent study done by Schnitz and Bression, (1988) they reported a significant fall in the incidence of eczema if exclusive breastfeeding is continued beyond twelve weeks. Under the usual unhygienic conditions coupled with poverty in the developing countries, artificial feeding means the use of too diluted, highly contaminated solutions of cow's milk resulting at best in undernutrition or at worst marasmus or kwashiorkor and diarrhoeal diseases. Health Care providers should therefore help to ensure that women who choose not to breastfeed fully understand the financial implication of their decision.

An extract from a UNICEF position on breastfeeding dated July 1989 highlights the increasing concern over the impact of bottlefeeding on house-hold finances. In many countries, while the prices of infant formula is rising, income has fallen. For the mother who has started to bottlefeed few days post-partum, once the growing baby needs more infant formula after the age

of two months, the choice is often obvious with either the rest of the family, eating less well or the tins are made to last longer by diluting less milk powder in more water. This can result in infant malnutrition.

Dr. Hiroshi Makajima, Director General of the World Health Assembly in 1989 reported that baby bottle disease, or disease brought about by improper use of infant-formula is one example of man made illness that is disastrous natural resources breastmilk.

Disadvantages of Bottle Feeding

A lot of disadvantages is associated with bottle-feeding these include:-

- (1) the higher incidence of diarrhoeal diseases in bottlefed infants. The more often a child is ill, the more likely it is that he or she will become malnourished. That is why, in a community without portable drinking water, a bottle fed baby is 25 times more likely to die of diarrhoea than a baby fed exclusively on breastmilk for the first four to six months (Contac, 1989).
- (2) Bottle-feeding is expensive, but human breastmilk is priceless. Additionally bottle-feeding is not ready made, it required

elaborate preparations even when an infant is urgently in need of food.

- (3) Cow's milk, water or other drinks reduces the amount of milk the baby takes from the breast. This leads to less milk being produced.
- (4) The use of a bottle to give other drinks can cause the baby to stop breastfeeding completely. The suckling action of the bottle feeding is different from that of sucking the breast and the baby will usually prefer the bottle because less sucking is required.
- (5) Cow's milk, milk-powder solutions, maize gruel and other infant foods given by the bottle do not give babies any special protection against diarrhoea, cough and colds and other diseases.
- (6) Cow's milk or milk-powder solutions can cause poor growth if too much water is added in order to make it go further.
- (7) Cow's milk or milk powder solutions go bad if left to stand at room temperature for a few hours.

- (8) Bottle-feeding does not foster a good mother baby relationship, as it can be administered by anybody.

Force-Feeding

This is a traditional method of feeding infants. However with the advent of western civilization the practice is rapidly fading away. This practice is more common among the Yoruba speaking area of Nigeria, as well as in some eastern part of the country.

It involves laying the infant across the mother's or the feeder's thigh, using the left feeder's elbow to force the child in a place on the feeder's thigh, and with the feeder's left hand holding the container of the feed, pouring the feed into the hollow of the feeder's right palm to force the feed into the child's mouth. This practice has been observed to be associated with the child struggling to take in air and in the process pains and inadequate air intake, and choking can easily take place. The risk of gastroenteritis is very high, if the feeding container and the feeder's hands are not properly washed and cleaned. It also takes time to feed an infant.

Cup and Spoon Feeding

This is a process of feeding infants with the aid of cup and spoon. The feed can either be the expressed milk from the mother's breast or any other artificial foods like milk powder solution maize gruel, water or glucose solutions or any other infant food. This method is usually employed when the mother's breast is sore or any disease of the breast which can disturb proper breast-feeding e.g. if retracted nipple is present. Breastmilk can also be expressed from another person's breast other than the real mother into a cup and fed with spoon to the infant, in situations where the real mother is absent, sick or dead. An infant can also be fed with cup and spoon if the infant has suckling problem.

This method of feeding may also cause infection such as diarrhoea and other metabolic problems especially if the feeding cup and spoon are not carefully washed and sterilized. In addition mothers or feeders need to be patient as it takes time before the infant is adequately fed, as small quantity of the feed is given at a time. This method therefore requires elaborate knowledge of cleaning and sterilization and patience.

Weaning Practice

Weaning is the process by which the infant gradually becomes accustomed to the full adult diet. Weaning period is a dangerous time for infants and young children. It is well known that there is a higher rate of infection particularly of diarrhoeal diseases during weaning than at any other period in life (Opawoye, 1989) and malnutrition is especially common during this period.

Weaning usually starts around 4-6 months, a time when breastmilk alone is not enough to make the baby grow well. Therefore, other foods are given in addition to breastmilk.

In the middle and late 1970s, literature in Europe and America highlighted the falling incidence and duration of breast-feeding with introduction of semi-solid foods. Trowell, (1975) reported that 40.0% of normal children attending a 'baby well' clinic in the North England were being fed semi-solid food during the first four weeks of life, and by three months 93.0%. High level of technology, presence of refined flour, sugar and processed purees of meat and vegetables enable these foods to be fed within the first few weeks

of life, Trowell, (1975) concluded that the main reason is rapid growth and prestige for a large baby in western type of civilization.

As reported by Fernando et al, (1987) by favouring modernization, urban environment has been a fertile ground for the promotion of bottle feeding at the expense of maternal lactation, particularly among household where demands of urbanism impose various limitations on adequate breastfeeding. On the other hand weaning and complementary feedings are in general better accomplished.

The role of medical professionals in poor weaning practices has been viewed critically by many scholars. Trowel, (1975) claimed that the medical personnels have altereo their services concerning the age at which semi-solid is introduced to children. He reported that in 1896 they advocated for second year as right age for the introduction of semi-solid foods. By 1934 it was changed to 6-7 months of life and by 1962, it was changed again to 2nd and 3rd month of life.

Schwals, (1979) accused the medical profession of quietly agr, ein to the early introduction of semi-

Components of Weaning Food

Weaning food should especially consist of milk and different food groups that the family eats, such as carbohydrate, protein and fruits. These foods should be mixed adequately, for example plantain plus fish, Rice and Beans, Rice and Sardines etc.

Yam plus spinach plus fish or rice plus pumpkin plus Beef.

Duration of Weaning

Weaning is expected to last as long as the child is fully accustomed to the family menu and when he no longer breastfeed.

Custom and Infant Feeding

Cultural practices are still major obstacles to maintaining adequate nutrition of infants in many developing countries such as Nigeria. In a study done in Western Nigeria, by Jelliffe, (1953) he observed that native concoction of herbs known as 'Agbo' was fed to infant thrice daily for the first few days of life. He reported further that an attempt at artificial feeding was almost inevitably followed by gastroenteritis, marasmus and death. He however reported that these trends of events was possible because elaborate precautions necessary for boiling water or cleaning

bottles may be impossible under African living condition such as Ibadan. Osei (1979) and Alakija, (1980) in their studies at Ibadan supported these assertions. Both authors attributed the effect of ignorance as a causative factor to malnutrition in Africa and other developing countries.

Brown, (1977) reported that in Pakistan, colostrum is considered as taboo and therefore not given to the infants while in India a native concoction (Jamnai-ghutti or home made sugar water) is given to infants to lubricate the intestinal tract. In a study done by Wajih, et al (1987) they reported that in Saudi Arabia babies are seldom breastfed at birth. On the first day they are given a few sips of water and then 'ghee' a kind of fluid material, until the mother lactates on the second or third day. Ghee is thought to lubricate the infants' gut and provide initial nourishment; when this is not available, a few drops of castor oil are used to lubricate the gut and then a wet-nurse will breast-feed the baby until the mother lactates. There was a similar report by the same group of people in another study at Yemen a neighbouring Arab Republic, where the majority of mothers start breastfeeding on

the third day. All these interfere with adequate nutrition of the infants.

In Nigeria cultural taboos and superstitions exist; for instance, in some states of Nigeria people believe that eggs make children to steal and so children are restricted from taking eggs. Also excessive consumption of meat is believed to cause worm infestation and the grown ups eat the bulk of the available meat. Traditionally, fruits in many instances are not made part of family menu, and children are often beaten for helping themselves to some attractive fruits on trees.

Conceptual Frame work

Every human behaviour is caused by one factor or the other, hence certain factors can be attributed to the infant feeding practices of mothers in Oyo town. Lawrence Green precede model can be used to classify the behavioural patterns of mothers in Oyo concerning their infant feeding habit.

Lawrence Green precede Model

This model is a diagnostic model, otherwise known as the antecedent model used in classifying health related behaviours of people. This model is applicable to health behaviours from the:-

- (1) Epidemiological point of view. For instance infant feeding problem among

mothers in Oyo town.

- (2) Behavioural and non behavioural aspect. This may include looking into what the feeding habits are like; how, when and what are used in feeding infants. For instance in some states of Nigeria people believe that eggs make children to steal and so children are not allowed to take eggs, or a situation where the grown ups eat the bulk of the available meat without allowing the children who really needs it to take it because they believe meat cause worm infestation in children. Also a situation in Yemen, a neighbouring area of Arab Republic, where a newborn is not breastfed until the third day after birth.

- (3) Educational diagnosis. This include the examination of:-
- (a) Predisposing factors. This may include mother's attitude to feeding infants, their belief about infant feeding, their social values concerning infant-feeding and what

is their existing knowledge about infant feeding. For instance the use of ghee in Saudi Arabia to feed infants, because they believe it lubricates the gut prior to the actual breastfeeding, or the use of 'Agbo' by some mothers in Oyo town.

(b) Enabling factors. These include the factors that may make mothers feed their infants the way they do. For example, resources available to them, such as health facilities, services, time money and skills. For instance those mothers working outside the home wean their children earlier and introduce supplementary food earlier. Their economic status is another enabling factor that makes it easier for them to wean their children earlier.

(c) Reinforcing factors. These are concerned with how an individual is influenced by other group of people, or how people initiate their behaviours. For instance the use of milk base infant formula, or bottlefeeding by illiterate mothers, because they immitate

their educated counterparts. This may also extend to infant weaning practices whereby prolonged breastfeeding among the non educated mothers is being replaced by short breastfeeding practice or early weaning practice.

In this study some aspects of this model are applicable such as extrapolating information about the feeding patterns of the respondents, including the factors responsible for the existing feeding practices, such as bottlefeeding, and early weaning practices.

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CHAPTER THREE

METHODOLOGY

This chapter focuses on the description of the study area, objectives of the study, research design, target population, sampling technique and instrument for data collection among mothers.

Description of the Study Area

Oyo town is an ancient city bounded in the north by Ogo-Oluwa Local Government, in the east and south by Afijio Local Government.

Based on the 1963 population census, Oyo town has a population figure of 72,133. The town is segregated into residential areas. The majority of the descendants of the early original Yoruba settlers live in the crowded northern and central areas of the town, known as the indigenous areas. These areas are divided into series of many family units. Most quarters have farm and family houses outside the city, in the village known as the rural colonies of the compounds. The head of each compound (usually males) may sometimes have a title in the Oyo political organisation. There are some recognised ruling houses whose heads can eventually

become the "Alafin of Oyo". The Chieftaincy is rotational in nature. The majority of the men are predominantly illiterates with very few having up to secondary and post secondary education. They are mostly small scale business men, craftsmen, unskilled workers and considerable numbers of farmers. The women in addition to their domestic activities care for children, trade in food stuff, and engage in sewing and other petty trading. The citizens are predominantly Muslims with very few Christians who are mostly non indigens forming the majority. The common diseases of many children include measles, diarrhoeal diseases, malaria due to poor conditions of living and poor nutritional status. The peripheral areas and the south are inhabited by the immigrants from other parts of the country who are mostly educated see Figure 3:1. The children appeared to have better nutritional status than the indigenous or the traditional group.

For administrative purpose Oyo town is divided into zones. These are:

- (a) indigenous
- and (b) non-indigenous or transitional area.

MAP OF OYO TOWN



MAP OF OYO TOWN



Indigenous Zones

This zone is regarded as the inner core area inhabited mostly by the indigens. They are predominantly Muslims, with very few Christians. The Christians constituted majorly by the few educated ones among them. Trading especially small scale business is most common. We also have craftsmen and unskilled workers, with considerable number of farmers in this zone.

In this zone there are no big government hospitals except a private maternity centre situated at Ajagba a health office where extensive infant welfare clinic is held at Agunpopo, and three local government maternity centres which are situated at Kolobo area of Isale Oyo, Sabo and Afin areas. In addition, there are numerous private clinics and Maternity Centres scattered all over the zone. There is pipeborn water and electricity supply provided by the government. However the available waste disposal amenities are inadequate and are insanitariously utilized.

Non-Indigenous/Urban transitional Area

This zone is inhabited by immigrants from other parts of the country, both in and outside Oyo State. Most of the men have post secondary education and are usually professionals, administrators or civil

servants, holding high post in their respective places of work. The wives are either trained teachers, Nurses, Midwives or seamstresses. Most of them also have post secondary education. Their average income is much higher than those of the families in the indigenous area.

In this area there is one big government hospital (State Hospital Oyo) situated at Owode and a Dental Centre situated along the hospital road. In addition there are numerous private hospitals, scattered all over the place. There is provision of pipeborne water and electricity. In addition there are facilities for waste disposal. Therefore the level of environmental sanitation is much better than that of the indigenous zone.

Objectives of the Study

The overall objective of this study is to provide a descriptive information about the existing pattern of infant feeding in Oyo town, thereby providing a baseline data on which appropriate nutrition education intervention can be based.

Specific Objectives

The specific objectives of this study are to:-

- (1) Assess breastfeeding practices of Nursing mothers.
- (2) Assess the extent to which local food materials are used as supplements to breastfeeding.
- (3) Identify the average age at which infants are weaned.
- (4) Identify the types of infant weaning diets used by mothers in Oyo town and the factors responsible for such use.
- (5) Based on objectives 1-4, highlight the nutritional education implication of the feeding practices.

Research design

This is a descriptive exploratory study. It assesses the infant feeding practices among mothers in Oyo town. It takes into consideration the age of mothers, level of literacy and other socio-economic variables as well as infant feeding practices that need be targeted by nutrition education.

Target Population

The target population consists of nursing mothers who must have had at least two children and are currently breastfeeding an infant.

Sampling Method

A stratified random sampling technique was used in the selection of the subjects for the study.

In choosing the study sample, Oyo town was stratified into two zones:-

Indigenous (or inner core) and non-indigenous (or transitional zone). The Indigenous zone comprises of quarters inhabited by the indigens viz Isale-Oyo, Koso, Oke-Olola, Oke-Afin, Ogbeyo, Asipa, Agunpopo, Iyaji, Iseke, Apaara, Oke-Apo, Balogun and Jabata. The non-indigenous zone comprises of those quarters inhabited by mostly non-indigens i.e. New Akeetan, New Iseke, Owode, Araromi, Layout and Sabo.

Secondly each of these zones was further stratified into quarters. Two residential quarters were then selected by simple random sampling using the ballot system. From each of the selected quarters all the

streets were listed. Each of the streets was then entered into at one end (selected by balloting) and every fifth house was systematically selected in each of the streets.

In the selected houses all mothers with at least two children and who are currently breastfeeding an infant were finally settled for interview.

Method of Data Collection

Questionnaire:— The main tool for data collection was a Questionnaire, developed by the author. The questionnaire sought information on demographic characteristics of the respondents, child feeding practices and child welfare. Specifically the questionnaire focused on the following variables.

- (1) Educational background of parents.
- (2) Type of mothers and father's job.
- (3) Number of children in the family.
- (4) Age interval between children.
- (5) Type of infant formula commonly used by mothers.
- (6) Age at which infant formula is introduced to the children.
- (7) Number of times a child is breastfed per day.
- (8) Type of food materials used as weaning diet and reasons for choice.

- (9) Age at which the infants are weaned.
- (10) The child care given when mother is not at home.

Four Community Health Assistants were employed as research assistants. They have been exposed to the concept of infant welfare programmes during their training at the School of Hygiene Ibadan and College of Health Technology at Ilesha. They are also conversant with the study areas since they have been residing in the town for almost three years.

Training of Research Assistants

The Research Assistants were trained for two days on how to administer the questionnaires.

Pre-Testing

Pilot-testing was done using ten literate mothers at primary Health Centre, Ilora via Oyo. This is to test the questionnaires for clarity and decision or how well the questions are understood by the respondents. This exercise led to re-adjustment of some of the questions. For instance in this study the use of house-help is believed to mean an employed house-help or house-help on salary. However the pre-test findings indicated that of mother in-laws, grandmothers and

paid house help are all regarded as house-helps.

Also some spelling mistakes were corrected such include the typographical errors such as 'Bothe' instead of 'Both', 'Netend' instead of 'Nutrend'. The other purpose of the pre-test was to assess the performance of the research assistants. The author assessed their performance in respect to the number of question items that were incorrectly filled - It was observed that between one and two of such question items were incorrectly filled. These were questions in which typographical errors were found, this was re-tested again and it was found that they were correctly filled.

Validity and Reliability

During pre-test exercise, the author also tried to find out whether the instrument (questionnaire) measure what it was intended to measure. The other purpose was to observe how well the respondents understood the questions, and how well they could give appropriate answers. The pre-test response of the mothers were compared to see how appropriate the answers fitted the question items. This was found to be satisfactory. Furthermore the same respondents were interviewed at different times by each research assistant and answers obtained were compared. The answers were

found to be consistently the same.

Administration of the Questionnaires

Face to face interview were used to collect information from both the literate and illiterate mothers.

The questionnaires were administered between 4 p.m. and 7.30 p.m. daily when most mothers were available at home.

Data Analysis

The data obtained were manually sorted out and edited. Frequency distribution and percentages were computed using a pocket calculator. The relationship between some variables were determined, using chi-square (χ^2) test.

CHAPTER FOUR

R E S U L T S

This chapter discusses the findings of the study. The chapter is presented in three sections viz;-

- (i) the demographic characteristics
- (ii) Care of the children and
- (iii) the breastfeeding practices and food supplement.

Section One

Demographic Characteristic

A total of 203 mothers comprising 100 (49.3%) from the indigenous areas and 103 (50.7%) from the non-indigenous/urban areas participated in the study.

Age distribution

Respondents from the two groups fall within the age range of 15-44 years. Most respondents 86 (42.4%) are within the age range of 30-34 years of age; 50 (24.6%) and 36 (17.7%) in the non-indigenous and indigenous areas respectively fall within this age group. This is followed by 46 (22.7%) in the 25-29 years age group (Table 1).

TABLE 1

Age of Mothers

Ages	Indigenous Group	%	Non-Indigenous Group	%	Overall Total	%
15-19 yrs	1	1	1	0.9	2	0.9
20-24 "	18	18	11	10.1	29	14.2
28-29 "	26	26	20	19.4	49	22.7
30-34 "	36	36	50	48.5	86	42.4
35-39 "	10	10	10	9.7	20	9.9
40-44 "	19	19	1	10.6	20	9.9
TOTAL	100	100	103	100	203	100

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Religion of Mothers

Overall, more than half of the respondents 106 (52.2%) are Christians. There are more Muslims (70.0%) in the indigenous areas, while Christians (73.7%) predominants in the non-indigenous zone. (Table 2)

Occupation of Mothers

Overall 92 (45.3%) of the respondents are civil servants. This comprises 22% of the indigenous study population accounting for just 10.8% of the entire civil servants, and 67.9% of the non indigenous study population representing 70 (34.5%) of the civil servants population.

Therefore majority of the respondents in the non-indigenous zone are civil servants as compared with the indigenous zone, where traders predominates (Table 3) The relationship between mother's occupations and breast-feeding practice were statistically significant $P < 0.00$ see Table 3.

Educational Background of Mothers

The educational level of the respondents is presented in Table 4. Most respondents 71 (34.9%) had post secondary education with majority of them 53 (26.1%) from the non-indigenous zone.

Overall, 42 (20.6%) are illiterates, the indigenous group having a major share of 34, representing about 81.0% of the entire number of illiterates. In addition 46 (22.6%) respondents had primary education with the indigenous group having the lion share of 33 (71.7%). The relationship between education of mothers and breastfeeding practice was statistically significant - $p < 0.00$ see Table 4.

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TABLE 2

Religion of Mothers

Religion	Indigenous Group	%	Non-Indigenous Group	%	Overall Total	%
Christianity	30	30	76	73.7	106	52.2
Islam	70	70	27	26.7	97	47.8
Traditional	-	-	-	-	-	-
Others	-	-	-	-	-	-
Total	100	100	103	100	203	100

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TABLE 3Occupation of Mothers and Breastfeeding Practices

Occupation	Breastfeeding Practice		
	Indigenous Group	Non-Indigenous Group	Total
Civil Servant	22 (45.3)	70 (46.7)	92
Trading	68 (47.3)	28 (48.7)	96
Full time House Wife	10 (7.4)	5 (7.6)	15
Total	100	103	203

** Column Percentages in parentheses.

$\chi^2 = 43.30$ df = 2 $P < 0.00$

* Excluded from the χ^2 test

TABLE 4

Educational Background of Mothers
and Breastfeeding Practices

Educational Background	Breastfeeding Practice		
	Indigenous Group	Non-Indigenous Group	Total
Illiterate	34 (20.1)	8 (21.3)	42
Private	33 (22.7)	13 (23.3)	46
Secondary	15 (16)	19 (17.3)	34
Post-Secondary	18 (39.9)	63 (41.1)	81
TOTAL	100	103	203

$$\chi^2 = 50.23 \quad df = 3 \quad P < 0.00$$

- Column percentages in Parentheses
- Excluded from χ^2 test

Marital Status of Respondents

The marital status of the respondents is shown in Table 5. Almost all the respondents (96.5%) are married.

Occupation of Respondents' Husband

The type of work the husband is doing as the head of a family is a function of how well he can provide adequately for the financial cost of the feeding activity of the household. More than half of the respondents husbands 110 (54.2%) are civil servants and were mostly from the non-indigenous zone 65 (63.1%) and corresponding to (32.0%) of the entire study population, while 45% of the indigenous group are civil servants, and this corresponds to (22.2%) of the entire study population.

The second major occupation of the respondents' husbands is trading, out of the entire 61 (30.0%) traders, the non-indigenous group accounted for 23 (11.3%) corresponding to (22.3%) of the non-indigenous population while the rest 38 (18.7%) is constituted by the indigenous population.

The rest are either farmers or retired officers

(Table 6).

TABLE 6

Occupation of Respondents' Spouse

	Indigenous group	%	Non-Indigenous group	%	Overall Total	%
Civil Servant	45	45.0	65	63.1	110	54.2
Trading	38	38.0	23	22.3	61	30.0
Retired	9	9.0	6	5.8	15	7.4
Farming	8	8.0	9	8.8	17	2.4
TOTAL	100	100	103	100	203	100

SECTION TWO

Number of Children Ever Had

The number of respondents' children are presented in Table 7.

Out of the 203 respondents, 60 (29.6%) have two children each, more of these respondents are from the indigenous zone. More respondents 30 (14.7%) from the indigenous zone had five or more children as compared with 11 (5.3%) in the non-indigenous zone.

Age of the Present Baby

Nearly half of the total respondents (100) 49.3% are presently nursing babies age 0-5 months, this group is constituted by 55% of the indigenous group corresponding to 27.1% of the entire study population. This is followed by 57 (28.1%) who are nursing babies between 6-10 months, constituted by 27% of the indigenous population corresponding to 13.3% of the entire study population. (Table 8).

TABLE 7Number of Children Ever Had

Number of Children	Indigenous Group		Non-indigenous Group		Overall Total	
2	32	32.0	28	27.1	60	29.6
3	26	26.0	36	36.0	62	30.5
4	12	12.0	28	27.1	40	19.7
5	18	18.0	7	6.7	25	12.3
6	12	12.0	4	6.7	16	7.9
TOTAL	100	100	103	100	203	100

TABLE 8

Age of the Present Baby

	Indige- nous zone	#	Non-indi- genous Zone	#	Overall Total	#
0 - 5 months	55	55.00	45	43.6	100	49.2
6-10 "	27	27.0	30	29.1	57	28.0
11-15 "	14	14.0	14	13.5	28	13.8
16-20 "	-	-	10	9.7	10	5.0
21-25 "	4	4.0	4	3.8	8	4.0
		100	103	100	203	100
TOTAL	100					

Who Cares for the Children When Mother is not Around

Many respondents 63 (31.0%) keep their children with neighbours; the majority, 41 (65.1%) of whom are from the indigenous zone and 22 (34.9%) of this number were from the non-indigenous zone. In addition 28 (13.8%) keep their babies with mother-in-laws, and 22 (10.8%) with househelps (Table 9).

SECTION THREE

Types of Babyfood used

Table 10 shows the types of baby foods by the respondents. In all 138 of the total study population used babyfoods. More respondents in the non-indigenous zone used these babyfoods than those from the indigenous areas. Similac ranked first among the babyfoods products of the 138 (68.0%) who used products, 40 (28.9%) used Similac. This is followed by SMA used by 38 (26.2%) of the respondents and NAN reportedly used by 32 (23.2%) of the respondents.

TABLE 9

People Who care for the Child in Mother's Absence

	Indi- genous Zone	%	Non-indi- genous Zone	%	Overall Total	%
Day Care	15	15.0	35	33.9	50	24.6
Mother-in-law	17	17.0	11	10.6	28	13.8
House-help	4	4.0	18	17.4	22	10.8
Grandmother	6	6.0	11	10.6	17	8.4
Neighbour	41	41.0	22	21.3	63	31.0
Nobody	17	17.0	6	5.8	23	11.3
TOTAL	100	100	103	100	203	100

TABLE 10

Types of Babyfoods Used

Types	Indige- nous zone		Non-Indi- genous zone		Overall Total	
		%		%		%
Similac	14	14.0	26	25.2	40	29.0
NAN	16	16.0	16	15.5	32	23.2
S.M.A.	13	13.0	25	24.2	38	27.6
Lactogen	2	2.0	4	3.8	6	4.3
S 26	-	-	1	0.9	1	0.7
Cow & Gate Formula M	6	6.0	5	4.8	11	8.0
Cow & Gate Milk Plus	-	-	9	8.7	9	6.5
Lactogen Follow up	-	-	1	0.9	1	0.7
TOTAL	51	51	87	84.4	138	100

Food Supplement given by those Respondents who did not use babyfood

Of the entire study-population 65 (32.0%) did not use babyfood for their infants. Out of these 45 (33.8%) are from the indigenous zone. Out of this number, 31 (37.7%) exclusively give breastmilk alone to their children while, 25 (38.5%) gave breastmilk with local herbs. Only 9 (13.8%) gave breastmilk with local foods.

Age at which Babyfood is given

Overall, almost half of the respondents 99 (48.8%) gave baby foods to their babies from the first day of birth, consisting of 58.6% from the indigenous and 42 (41.4%) from the non-indigenous. Furthermore almost a quarter 50 (24.6%) of the respondents gave babyfood to their infants between 1-5 months old. Majority of these 35 (70.0%) are from the non-indigenous zone.

TABLE 11

Food Supplement given by those Respondents who did not use Babyfood

	Indigenous Zone	a	Non-Indigenous Zone	b	Overall Total	c
Breast Milk Alone	19	42.2	12	60.0	31	47.7
Breast Milk with Local Herbs	20	44.6	5	25.0	25	38.5
Breast Milk with Local Foods	6	13.6	3	15.0	9	13.8
TOTAL	145	100	20	100	65	100

TABLE 12

Age at which Babyfood is given

Age in Months	Indigenous zone	#	Non-indigenous Zone	#	Overall Total	#
Under One Month	41	41.0	58	56.8	99	48.8
1-5 months	15	15.0	35	33.9	50	24.6
6-10 "	8	5.0	5	4.8	13	6.4
11-12 "	-	-	2	1.9	2	1
16-20 "	-	-	3	2.8	3	1.5
21-25 "	-	-	-	-	-	-
Not given	36	36.0	-	-	36	17.7
TOTAL	100	100	103	100	203	100

How long Babyfood is given to children

More than a quarter of the total respondents 62 (30.5%) gave babyfood (tinned food) for the first five months of their infant's life, then majority of this number 32 (51.6%) are from the non-indigenous areas. In addition to this, 51 (25.1%) gave babyfood for 6-10 months; the majority 32 (62.7%) are also from the non-indigenous zone.

Furthermore 34 (16.7%) gave it for 11-15 months for 21-25 months. (Table 13).

Quantity of babyfood supplement used by mothers per month

Many respondents, 61 (30.0%) reportedly use two tins of babyfoods per month to supplement breastmilk. This is followed by 35 (17.2%) who use three tins per month majority 26 (13.0%) who are from the non-indigenous zone.

However of the 23 (11.3%) who reportedly used one tin of babyfood per month, majority 18 (8.9%) are from the indigenous zone (Table 14).

TABLE 13

Duration of Feeding with baby food

Age in Months	Indigenous Zone	#	Non-indi- genous Zone	#	Overall Total	#
1-5 mths Old	20	20.0	32	31.1	52	25.6
6-10 " "	19	19.0	32	31.1	51	25.1
11-15 " "	14	11.0	20	19.4	34	16.7
16-20 " "	3	3.0	7	6.8	10	5.0
21-25 " "	13	13.0	3	2.9	16	7.9
Not given	31	31.0	9	8.7	40	19.7
TOTAL	100	100	103	100	203	100

TABLE 14

Quantity of Babyfood Supplement used
By Mothers per month

No. of Tins	Indigenous Zone	#	Non-indigenous Zone	#	Overall Total	#
One per month	18	18.0	5	4.8	23	11.3
Two " "	31	31.0	30	29.1	61	30.0
Three " "	9	9.0	26	25.2	35	17.2
Four " "	9	9.0	19	18.2	28	14.0
Five " "	2	2.0	4	3.8	6	3.0
Six " "	3	3.0	2	1.9	5	2.5
None	28	28.0	17	16.5	45	22.1
	100	100	103	100	203	100
TOTAL						

How long the previous child was breastfed

Eight (3.9%) of the 203 respondents claimed to have breastfed their previous children for between 0-5 months 49 (24.1%) for 6-10 months, 63 (31.0%) for 11-15 months and 49 (24.1) for 16-20 months. Results also showed that more respondents in the non-indigenous zone breastfed their last child for shorter periods compared with those from the indigenous. (Table 15)

How long the present baby is to be breastfed

When asked how long the respondents wished to breastfeed their present children. The following answers were got:-

(i) those wishing to breastfeed for 16-20 months accounted for 73 (36.0%) of the total respondents comprising 51 (51.0%) from the indigenous and 22 (21.4%) from the non-indigenous zone are in this category;

(ii) those wishing to breastfeed for 6-10 months constituted 62 (30.5%). The latter group comprised thirteen (13.0%) respondents from the indigenous group compares to 49 (47.6%) from the non-indigenous zone fall into this category.

TABLE 15

How long the previous child was breastfed

	Indige- nous Zone	%	Non-indi- genous Zone	%	Overall Total	%
0 - 5mths	2	2.0	6	5.8	8	4.0
6-10 "	11	11.0	38	36.8	49	24.1
11-15 "	27	27.0	36	34.9	63	31.0
16-20 "	35	35.0	14	13.5	49	24.1
21-25 "	25	25.0	9	8.7	34	17.0
TOTAL	100	100	103	100	203	100

TABLE 16

How long the present baby is to be breastfed

Age	Indigenous Zone	§	Non-indi- genous Zone	§	Overall Total	§
0-5 mths	3	3.0	17	17.5	20	9.9
6-10 "	13	13.0	49	47.5	62	30.5
11-15 "	20	20.0	13	12.6	33	16.2
16-20 "	51	51	22	21.3	73	36.0
21-25 "	13	13	2	1.9	15	7.4
TOTAL	100	100	103	100	203	100

Number of times the present child is breastfed per day

The frequency of exclusive breast feeding practice per day by the respondents is presented in Table 17. Overall 82 (40.4%) respondents are breastfeeding their children 1-5 times per day. This comprise greater proportion of 60 respondents (58.3%), from the non-indigenous zone compared to 22 (22.0%) from the indigenous zone; are in this category. This is followed by 66 (32.5%) respondents who are breast feeding 6-10 times per day with majority 38 (57.6%) of who are in the indigenous zone. Those breastfeeding 11-15 times per day constituted 55 (27.1%) of the total study population, 40 (40.0%) of respondents in the indigenous zone and 15 (14.5%) in the non-indigenous zone fall into this category. The greater number of respondents in the indigenous zone currently breastfeed their children more frequently than the non-indigenous group.

TABLE 17

Number of times the present Baby is Breastfed per day

Number of Times	Indigenous Zone	%	Non-indigenous Zone	%	Overall Total	%
None	-	-	-	-	-	-
1-5 Times	22	22.0	60	58.2	82	40.4
On Demand	78	78.0	43	41.6	121	59.6
TOTAL	100	100	103	100	203	100

Major types of food used for weaning

Overall about half, 133 (65.5%) of the total respondents use tinned food (babyfood) as weaning diet. Comprising 93 (69.9%) from the non indigenous zone corresponding to 90.3% of the indigenous zone study population and 40 (30.1%) from the indigenous zone corresponding to 40% of the indigenous group study population.

Many respondents 47 (35.3%) use Ogi and powdered milk followed by 35 (26.3%) who use "Cerelac". A greater proportion of respondents in the non-indigenous zone 30 (29.1%) compared with 5 (5.0%) in the indigenous used babyfood. (See Table 18).

Who finances the babyfood

Fifty-seven (28.1%) of the total respondents claimed that their husbands are solely responsible for buying their children babyfood while 18 (8.9%) claimed baby foods were bought by them without the spouse assistance. However 73 (36.0%) respondents claimed that it was a joint responsibility of both their husbands and themselves (See Table 19).

TABLE 18

Major types of food used for weaning

Type	Indigenous Zone	%	Non-indi- genous Zone	%	Overall Total	%
Nutriend	5	5	13	12.6	18	8.9
Cerelac	5	5	30	29.1	35	17.2
Frisolac	1	1	3	2.9	4	2.0
Babylac	1	1	1	0.9	2	1.0
Ordinary Ogi	4	4	23	22.3	27	13.3
Ogi + powder Milk	24	24	23	22.3	47	23.1
TOTAL	40	40	93	90.1	133	65.5

Who finances the babyfood

	Indige- nous Zone	%	Non-Indi- genous Zone	%	Overall Total	%
Yourself	6	6.0	12	11.6	18	8.9
Husband	26	26.0	31	30.0	57	28.1
Both of you	25	25.0	48	46.6	73	36.0
Babyfood not used	43	43.0	12	11.6	55	27.0
TOTAL	100	100	103	100	203	100

CHAPTER FIVE

DISCUSSION

The discussion is grouped under the following headings viz; the demographic characteristics, care of the children, feeding practices, exposure to health education implication of the fundings.

Demographic Characteristics

Results showed that the majority of the study population are in the 30-34 years age group. This findings seems to suggest the prime child bearing period of mothers in the traditional community of Oyo.

It was also found that majority of the respondents in the non-indigenous areas are christians, while the indigenous area is dominated by Muslims. This situation might have existed because families living in the non-indigenous areas are imigrants from other towns who may likely have benefited from early christian education, whereas most people from Oyo Town are traditionally Moslems.

There were more civil servants among the non-indigenous group (67.9%) whereas in the indigenous areas trading was the major occupation. The same observation was made in respect to the husbands' occupation. The occupational characteristics might have being as a result of the observation that the non-indigenous were transferred to work at Oyo by various governmental and non government establishments. The literacy level was found to be very low among the indigenous population (20.6%) when compared with the non-indigenous group (81.0%). This difference may be due to the observation that the non-indigenous zone is inhabited by the elites and professionals. The high level of education among this group has also affected the development of the area, as basic social amenities like potable water, constant electricity supply and good road network feature prominently.

Concerning the number of children ever had by the respondents, it was found that the majority of respondents having five children came from the indigenous zone. This may be a reflection of cultural perception to family planning, or lack of family planning awareness. Furthermore it was gathered through informal discussion with

the mothers that the respondents from indigenous area were of the view that a mother can have as many children as possible and that God will always provide what these children will eat. In addition, many believed that children can be fed with anything to supplement breastmilk. On the other hand many respondents from the non-indigenous area believed that a couple should have the number of children they can adequately cater for. This suggests that only the elite respondents have a positive belief about the relationship between large number of children and adequate nutrition.

Care of the children

It was observed that most mothers from the indigenous population, have more time to take care of their children. Furthermore the use of infant formula for feeding the children was found to be low. This situation might have existed because their occupation allows them to have control over time allocation for child care and may not provide enough financial gains to constantly buy infant formula foods.

On the other hand civil servants predominates in the non-indigenous zone and the nature of their work allows little or not time to devote enough time to child care,

unlike their indigenous counterparts. In addition this situation might have led to the compensatory use of infant feeding formulas, additionally, most respondents from the non-indigenous group made use of day care centres whilst their indigenous counterparts mostly kept their children with neighbours, grandmothers and mother-in-laws. The difference observed in the two groups might be a function of ;

- (i) extended family in favour of the indigenous group.
- (ii) necessity of day care in former.

Feeding Practice

Breastfeeding is well practiced by nearly all the respondents irrespective of their socio-economic level. It was discovered that breastfeeding is instituted few hours after birth among the two groups. This supports Omololu's (1965) view that breastfeeding is a reality in most of the developing countries. Furthermore findings from this study also showed that breastfeeding lasts for about two years among majority of the indigenous respondents, but for a shorter duration among the no-indigenous group. This might be due to the occupational differences between the two groups. Most of the indigenous respondents

were self-employed and this might have provided opportunity for prolonged breastfeeding practices. In addition, most of them believed that breastmilk is the best for children not only because it is free but also because nature exclusively provided breastmilk for nurturing the growth of the children. Furthermore breastfeeding is regarded as a traditional practice and a responsibility which good mothers should perform.

On the other hand, shorter breastfeeding practices were noticed among the non-indigenous population. Probably as a result of their educational level, economic power, nature of work and the value system.

It was also observed that breastfeeding was frequently supplemented with different types of milk base infant formulas like "SMA", "Similac", "Lactogen", "S 26", "Cow and Gate formula M" and Cow and Gate milk plus". The use of these infant formulas is not practiced among illiterate mothers, although many still make use of 'Agbo' (a local concoction from plants and local leaves) intermittently. The use of milk based infant formulas might be gaining ground among the illiterate mothers because they always like to copy the feeding practices of educated friends and relatives. It may also be related to massive advertisement and propaganda by the marketing agents of these infant baby foods. These

findings support the report of Rogers and Shoemaker (1971) that knowledge of an innovation to a certain extent is influenced by level of exposure to information about an innovation and that a high level of awareness may lead to that of the innovation.

Weaning Practice

Weaning foods given to the respondents children, most of whom are infants were observed to be mainly cereal based. These foods include "Cerelac" "Babylac" and "Ogi" (pap). The foods are usually given to children without consideration for the nutritional requirements of the children (see table 13). In addition over dilution of these infant formula were observed in a bid to ensure that the tin of milk lasted for a longer period. In some cases some mothers reported that a single tin of baby food is used for one month. This can be attributed to poor knowledge about the dilution methods of the cereals.

Furthermore haphazard weaning period type were observed. Some mothers reportedly gave breastmilk alone without supplements even after 4-6 months when breast milk alone is no longer sufficient to meet the calorific

requirement of the children. Others gave local food materials earlier than 4 months. The practices may be attributed to poor nutritional knowledge, ignorance or poor exposure to nutritional education. Osei (1979) and Alakija (1980), have identified ignorance as a major factor responsible for malnutrition in Africa and other developing countries.

Exposure to Health Education

Results showed that, a large number of respondents from both the indigenous zone (64.0%) and non-indigenous (76.6%) were exposed to health education messages about infant feeding practices. The major source of health education messages were from the health institutions especially the government owned health facilities. Infant weaning messages were obtained from the infant welfare and antenatal clinics. The second major source is through personal communications with neighbours and friends.

However despite the reported high level of exposure to infant nutrition education, it is surprising that the messages have not brought about the desired changes in infant feeding practices among the respondents. This

suggests that, the messages are either poorly designed or conflicted with social cultural norms and practices. Given these assumptions, it is desirable for health care workers in Oyo to re-examine their nutrition education approaches and methods.

Health Education of the Findings

Health education is concerned with reinforcing modifying and changing knowledge, attitudes and behaviours of people with the aim of helping them to develop practices that would ensure an optimum well being of people concerned. Its goal is to discourage human behaviour detrimental to health and to encourage positive behaviours that may enhance better health.

From this study it was discovered that many factors responsible for the inadequacies in feeding practices in Oyo is related to mothers' behaviour, value system and poor understandings of what infant feeding details and their belief and cultural system especially on breast feeding and weaning practices. Place of occupation, time off for breastfeeding mothers.

Breastfeeding Practice

It is obvious that breastfeeding practice in Oyo town is at 100% level. This positive practice needs to be further enhanced and sustained through health

education of mothers. Campaigns must stress that breastmilk is the best and has no substitute; the fact that its use can effectively promote child development and reduce diseases such as diarrhoea, and malnutrition should be regularly carried out. Furthermore health education using traditional song, poems and local discussions through various women's organisations should discourage short breast feeding period which can result from early introduction of infant formula, especially among the non-indigenous respondents.

Weaning Practice

The weaning practice was observed to be too early or too late among some respondents. Adequate information through campaigns, posters, leaflets and at ante-natal clinics should emphasise that weaning age should be between 4-6 months. In addition the nutrition education content should stress the type of locally available foods and household foods that can be used. Training using the demonstration strategies in the existing health facilities such as infant welfare clinics can be of help using local food materials such as maize, soya beans, groundnut and etc. Return demonstration by mothers is also vital.

Use of Infant Formula as Breastmilk Supplement

Most respondents have poor knowledge about how to properly mix infant formula. Usually a little quantity of milk powder is mixed with a large volume of water. To this end mothers should be educated in the markets, health centres and homes about the quantity required per feed relative to the child's age, the hygienic method of preparation in order to avoid overdilution, including frequency of feeding. The use of posters, be used. Emphasis however should be placed on breast-feeding especially for longer periods of time up to two

Use of Local Concoction (Agbo) as Food

The use of 'Agbo' as babyfood is an ancient practice, and still existing among the mothers especially the indigenous respondents. Before health education could play vital role in discouraging this practice, a lot still needs to be done by the medical scientist in assessing the nutritional value of different types of this 'agbo'. It is after such vital information is made available that health education can adequately address the nutritional content. However, mothers need to be cautioned, regarding its extensive use, being that the nutritive and medicinal contents are not yet known. This can best be done

through campaigns including the use of mass media communication channels, such as radio and television religious institutions could also be used to disseminate such information.

S U M M A R Y

From the findings of this study, it was observed that breast feeding practice is still highly practiced among the mothers in Oyo Town. This supports the observation of Omololu (1975) that the incidence of breast feeding is still 100% in Nigeria especially in the rural areas.

The practice and duration of breastfeeding is well established among the indigenous respondents than the non-indigenous respondents. This supports EL-Moven's (1981) report on a study done in Egypt that the illiterate rural women are better breast feeders than their urban counterparts, who had better education and higher income. El-Moven concluded that education has strong negative influence on duration and incidence of breast feeding. Similar results were found in Lebanon by zurayle (1981)

It was observed that weaning foods are given either too early or too late. This may be attributed to lack of knowledge concerning the precise age for weaning. Furthermore the use of local herbs (Agbo) as food for feeding infants is still practiced especially among the indigenous group. Finally it was also observed that although majority of the respondents have been exposed to infant feeding education, it seems as if a large number of them does not make use of the knowledge.

RECOMMENDATIONS

In view of the findings from this study the following recommendations are proposed.

- (1) That breastfeeding practice should be further encouraged among the educated mothers. Government should design a programme that will motivate educated mothers to breastfeed for longer periods. This may involve establishment of Creche/day care Centres very close to government ministries/establishments, Schools where mothers work and where specified hour should be spent to breastfeed their children.
- (2) Government should design and establish educational programmes for mothers near their places of work where they will be trained on breastfeeding and

on type of weaning diet and its preparation.

- (3) Maternity leave should be extended beyond three months to give mothers longer time for breast-feeding their children. Those who have resumed duty should be allowed to close early.
- (4) Government should legislate against the importation of infant weaning foods through taxation and import restriction.

These measures are likely to force a lot of mothers to using available local foods.

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APPENDIX I

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APPENDIX II

QUESTIONNAIRES

INFANT FEEDING PRACTICES OF NURSING MOTHERS IN OYO TOWN:
IMPLICATION FOR HEALTH EDUCATION

SECTION A PERSONAL INFORMATION

1. Name:
2. Address of mother
3. Age: 15 - 19 years
- 20 - 25 "
- 25 - 29 "
- 30 - 34 "
- 40 - 44 "
4. Religion i Christianity
- ii Islam
- iii Traditional
- iv. Others specify.....
5. Occupation i Civil servant
- ii Trading
- iii Full time
 House wife
- iv Workers in
 Private Company
6. Educational Background:
- i. Illiterate

- ii. Primary
- iii. Secondary
- iv. Post Secondary

7. Marital Status:

- i. Married
- ii. Single
- iii. Divorced
- iv. Widowed

8. Type of Family:

- i. Monogamous
- ii. Polygamous

9. Occupation of Husband

- i. Civil Servant
- ii. Trading
- iii. Retired
- iv. Farming
- v. Others (specify)

10. NUMBER OF Children.....

11. Children sex and their ages

No.	SEX	AGE
1.		
2.		
3.		
4.		
5.		

12. Age of Child you are Nursing

- i. 0 - 5 months
- ii. 6 - 10 months
- iii. 11 - 15 months
- iv. 16 - 20 months
- v. 21 - 25 months

-
-
-
-
-

13. Sex of the Child you are Nursing

- i. Male
- ii. Female

-
-

SECTION B: INFORMATION ABOUT CHILD CARE

1. (a) Do you have house help ?

- Yes
- No

-
-

(b) If yes, what contribution does she/he in caring for your child.....

(c) If No, where and with whom do you leave your child when going to your place of work.

- i. Day Care Centre
- ii. Mother in law
- iii. House help
- iv. Grand Mother
- v. Neighbour

-
-
-
-
-

2. What type of baby food do you use for your children?

- i. Similac
- ii. Nan
- iii. SMA
- iv. Lactogen
- v. S 26
- vi. Cow & Gate formula M
- vii. Cow & Gate follow up
- viii. Lactogen follow up
- ix. Lactogen starter
- x. Cerelac
- xi. Others (Specify).....

3. Was the child breast fed at all?

Yes

No

4. If yes, at what age did you start breast feeding?

- i. From Birth
- ii. One month old
- iii. Two month old
- iv. Three months old
- v. Above three

5. Was the breast feeding supplemented by any type of baby food?

Yes

No

6. If no, to the baby food given, what type of food did you give?

- i. Breastmilk alone
- ii. Breast milk with local herbs
- iii. Breastmilk with local food

7. Do you normally change from one baby food to another?

Yes

No

8. If yes, why?

- i. Because of cost
- ii. Non availability of the previous one
- iii. Metabolic problem or child inability to adjust to the previous one
- iv. Others reasons (specify).....

9. At what age do you normally give your child baby food?

- i. 1 - 30 days old
- ii. 1 - 5 months old
- iii. 6 - 10 months old
- iv. 11 - 15 months old
- v. 16 - 20 months old
- vi. 21 - 25 months old
- vii. No baby food group

10. For how long did you give baby food to your previous baby?

- i. 1 - 5 months
- ii. 6 - 10 months
- iii. 11 - 15 months
- iv. 16 - 20 months
- v. 21 - 25 months
- vi. No Baby food given

11. How many tins of baby food per month did you use for your previous children?

- i. One per month
- ii. Two per month
- iii. Three per month
- iv. Four per month
- v. Five per month
- vi. Six per month
- vii. None

12. For how long do you intend to give baby food to your present child and why?

- i. 1 - 5 months
- ii. 6 - 10 months
- iii. 11 - 15 months
- iv. 16 - 20 "
- v. 21 - 25 "
- vi. No baby food given

13. How many tins of baby food do you give to your present baby per month?

- i. One tin per month
- ii. Two tins per month
- iii. Three tins per month
- iv. Four tins per month
- v. Five tins per month
- vi. Six tins per month
- vii. None

14. For how long did you breast feed your previous child/ children ?

- i. 0 - 5 months
- ii. 6 - 10 months
- iii. 11 - 15 months
- iv. 16 - 20 months
- v. 21 - 25 months

Give reasons.....

15. For how long do you intend to breast feed your present child per day ?

- i. 0 - 5 months
- ii. 6 - 10 months
- iii. 11 - 15 months
- iv. 16 - 20 months
- v. 21 - 25 months

How many times do you breast feed your present child
Per day ?

- i. 0 time
- ii. 1 - 5 times
- iii. 6 - 10 times
- iv. 11 - 15 times

What type of baby food did you use for your previous
children at four months or during weaning ?

- i. Nutriend
- ii. Cerelac
- iii. Frisolac
- iv. Babylac
- v. Ordinary Ogi
- vi. Pap + powder milk
- vii. Others (specify)

Who finances the baby food ?

- i. Yourself
- ii. Husband
- iii. Bothe yourself & Husband
- iv. Not applicable

Have you ever been exposed to health education on
infant feeding ?

- Yes
- No

20. In what way has the health education helped you in feeding your children ?

Comment.....

21. What is your personal comment or experience on the increasing cost of baby food ?

Comment.....

22. How does it affect your child's feeding?

Comment.....

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