

THE EFFECT OF ANTENATAL PREPARATION AND POSTNATAL SUPPORT
ON BREAST FEEDING IN A GROUP OF JOHANNESBURG MOTHERS
BETWEEN JANUARY 1983 AND NOVEMBER 1984

BY

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ABSTRACT

This study was conducted in order to draw a profile of the breast feeding practices of a group of White Johannesburg mothers and to ascertain whether factors such as antenatal preparation and postnatal support could be linked to breast feeding success or failure.

For the purpose of this study the breast feeding experience was considered successful if the baby was breast fed for 3 months or more.

An interview schedule was drawn up and 200 mothers were interviewed over an eighteen month period when they brought their babies to the Municipal Health Clinics for immunisations.

The results of this survey showed that less than 50% of the sample were still breast feeding at 3 months.

The profile of the successful breast feeder that emerged was the following:- English speaking, comes from the higher social class and income bracket, has breast fed a previous baby successfully, feels that it is extremely important to breast feed a baby and definitely wanted to breast feed by the end of the pregnancy, has received some antenatal information preferably by an antenatal therapist, delivered at a private Johannesburg hospital and perceived her husbands attitude towards breast feeding as extremely positive.

No specific postnatal factors emerged which could explain why mothers gave up breast feeding when they did.

The complexity of factors involved in breast feeding success was highlighted in this survey. Antenatal information was one factor that emerged with a positive correlation to successful breast feeding.

DEDICATION

to my wonderful parents,

WILLIAM J. AND SYLVIA MILLER

DECLARATION

I declare that this research report is my own, unaided work. It is being submitted for the degree of Master of Science (Nursing) in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in any other University.

....A. Taback....

...26/3/91...

Adele Ethne Taback

Date

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Chapter 1

INTRODUCTION

Breast feeding is a physiological possibility for most women. Yet, according to Eiger and Olds (1972:xii) :

" It is a paradox and a puzzle that in a well developed medically advanced country like the U.S.A., of all the women who begin to breast feed their babies as many as 62% give up after a brief trial."

Scientifically accepted by most in the Western world, breast feeding is the best form of nourishment for the first 4-6 months of a baby's life. This has been endorsed by the Committee on nutrition of the American Academy of Paediatrics and the Nutrition Committee of the Canadian Paediatric Society. (Goldfarb and Tibbetts 1980:17).

Other more recent surveys of breast feeding duration in the U.S.A. point out that nearly two-thirds of all mothers begin breast feeding, but as many as half of these women have weaned the baby within two to four weeks after the baby's birth. Only one third of these mothers were still breast feeding at 3-4 months. (Auerbach 1987:13).

Increasing numbers of women are choosing to initiate breast feeding, but according to Goldfarb and Tibbetts (1980 :17)

"If one inquires about the degree of success in maintaining lactation beyond the neonatal period, the figures are not so positive. A young woman trying to breastfeed her newborn today stands a fair chance of experiencing lactation failure."

1.1 Commitment in concept

There is evidence to show that women really are committed in concept to breastfeed their babies.

To highlight this point, Thornton (1984:33) quotes a survey done by Carter (1984 unpublished) in Cape Town which showed that 98.3% of pregnant women interviewed at a maternity obstetric unit said that they wanted to breast feed their babies.

Thornton (1984:33) also quotes Marina Petropoulos, of Fairlady magazine, who receives approximately 1000 letters each month with questions on infant feeding. She describes how she is "often struck by the strength of women's desire to breastfeed."

Why is it then that such a small percentage of women actually manage to breast feed their babies for that critical period of time?

1.2 The complex nature of breast feeding.

Whether a mother is able to successfully breastfeed her baby is a highly complex and sensitive issue with no simple and straightforward explanations.

There are many factors that play a part viz. economic, physical, psychological, cultural and environmental factors. Trends and fashions may also play a part.

It is beyond the scope of this research report to deal with the issue of breastfeeding success in all its complexity. What will be dealt with is Goldfarb and Tibbett's response to the question: "Why do Western women experience lactation failure?"

They maintain that :

"In almost all cases of lactation failure, women do not have a source of basic information and emotional support. They do not understand the mechanism of breastfeeding. This lack of information, together with lack of support, is the overriding and preeminent cause of failure." (Goldfarb and Tibbett 1980:14)

Dr. Alice Ladas, a New York psychologist, also set out to discover to what extent information and support were related to successful breast feeding. By studying the breast feeding histories of 756 women, she found that the reason given by every woman in the group who stopped breast feeding sooner than she would have liked were related to lack of information about breast feeding. Dr. Ladas also found that the degree of encouragement exhibited by husbands, physicians, friends and relatives was an important factor in success. (Ladas 1972; 345).

1.3 Motivation for the research.

Over the years of working in the field, talking amongst other mothers and from empirical observation, it came to the attention of the researcher that many mothers displayed a positive attitude towards breast feeding antenatally and appeared to be committed in principle to try to ultimately breast feed their babies.

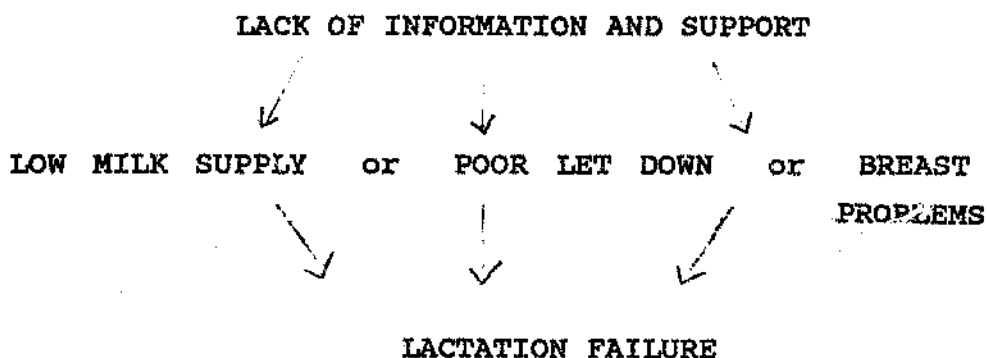
Despite this, it became apparent to the researcher that at their 6 week postnatal check up at a large Johannesburg Provincial Hospital, many mothers indicated when asked, that they had already given up breast feeding.

A survey of the statistics from the Johannesburg Hospital of infant feeding practices taken from the six week check up between November 1983 and December 1984, revealed that 46.2% were still breast feeding, 44.2% were bottle feeding and the remainder, 9.6% were doing both.

The question then arose as to how representative this was of all Johannesburg mothers and motivated a desire to ascertain what the current breast feeding practices in the Johannesburg area were. The other dimension of interest was to ascertain what factors could be linked to success or failure.

On further investigation, it was felt by the researcher that many of the reasons given by the mothers as to why they had terminated breast feeding could be linked to Goldfarb and Tibbett's theory.

They ascribed lack of success to lack of correct information on an antenatal level extending to the postnatal period when lack of emotional and physical support led to early lactation failure. It was these factors that the researcher wanted to look at in the Johannesburg population. Goldfarb and Tibbetts (1980:14) describe it in the following way;



Other researchers have also commented in a similar vein.

Jones and West (1983 :772) in their study draw attention to the paucity of advice on breast feeding both within and without the hospitals and the lack of consistency of such advice.

They assert that inadequate assistance for mothers wishing to breast feed has contributed to the unacceptably high rate of premature cessation of breast feeding and consequently to the disappointment of mothers.

1.4 Purpose of study.

This research was undertaken to draw a profile of the breast feeding practises among a group of White Johannesburg mothers who fit in with the category of urban and industrialised. This group was selected in keeping with similar studies that have been done of such groups of women overseas. Other South African population groups may have different practices that may have biased the data.

Further, this study will attempt to investigate factors such as antenatal education and postnatal support which could be linked to success or failure at breast feeding.

The research was carried out between January 1983 and November 1984.

1.5 Specific Objectives.

The specific objectives of this study were to :

- * establish breast feeding practises among a group of White Johannesburg mothers;
- * determine factors that influence successful breast feeding;
- * ascertain whether antenatal information on breast feeding was made available to a group of mothers;
- * establish who in the community provides the antenatal breast feeding information and support;

- * identify whether there are any intrapartum factors that can be highlighted which help or hinder the success of the breast feeding experience;
- * determine who provides education and support for the mother in the first few weeks postpartum;
- * ascertain the reasons mothers give for continuing or discontinuing to breastfeed their babies;
- * list what mothers perceive to be the advantages and disadvantages of breast feeding;

1.6 Assumptions.

This study is based on the following assumption:

While medical science is of the opinion that breast feeding is the best form of feeding for the first 4 - 6 months of the life of the full term baby, the majority of White Johannesburg mothers have given up breast feeding by 12 weeks.

1.7 Limitations to this study.

This study was limited to White women who live in the Johannesburg municipal area.

This study can be classified as a descriptive and exploratory survey. No in depth attitudes and feelings were examined. The data obtained from the women was taken at face value with no facility for probing the responses.

The sample to be interviewed was obtained from mothers who brought their babies to the municipal health clinics for immunisations. It was not possible in this study to include mothers who did not personally bring their babies to the clinics.

1.8 Definitions.

Successful breast feeding : Breast feeding has been successful if the mother was either fully breast feeding or breast feeding and giving the occasional bottle at 12 weeks.

Antenatal education : Provision of specific information by a health worker with the aim of preparing the pregnant mother for the breast feeding experience.

Postnatal Support : Assisting the mother with the breast feeding experience, in the form of physical help or emotional support by any person/persons whether lay or professional.

Intrapartum factors : Factors linked to the actual labour experience from onset to termination with the birth of the baby, e.g. Caesarian section, forceps etc.

Health Clinics : Clinics at which preventive and promotive health needs of the general population are catered for, including geriatric care, family planning, mother and child health and immunisations.

Chapter 2

LITERARY REVIEW

2.1 Brief Historical Review.

In order to view the causes of lactation failure in modern times in perspective, it is pertinent to review briefly the history of infant feeding.

Throughout history there have been many eras during which women have sought alternate methods of infant feeding other than feeding their babies themselves. In the ancient civilisations wet nurses were used. For example, Egyptian and Indian writings describe the attribute of a good wet nurse. It is said of the ancient Greeks and Romans that the wealthy routinely gave their children to a wet nurse who was usually a well cared for and respected slave. In the Hebraic tradition only the child of a mother who had died or could not feed her own was given to a wet nurse. The use of animal milk was described at the time of the ancient Greeks and Romans but this was much less common. (Goldfarb and Tibbetts 1980:19)

The lack of concern for children which characterised early industrialisation in Europe reached it's worst in the 17th and 18th centuries. For the first time working people as well as the rich turned away from breastfeeding.

The use of artificial feeds in the form of pap (broths of grain and water) and panadas (broths of flour, grain, water and occasionally animal milk) were used. Women were forced to work to survive with the result that children were often abandoned and poorly cared for.

The late 1800's saw improved conditions for children in Europe and a renewed trend back to breastfeeding. The wealthy still had the option of using a wet nurse, but this was increasingly less popular. (Golfarb and Tibbetts 1980:20)

The American Association of Paediatrics (1978:596) quotes Levin (1963) who described how bottle feeding was intended to replace the wet nurse when breast feeding by the mother was not possible. This was because many wet nurses were irresponsible and only the wealthy could afford to employ them.

According to Auerbach (1987:13) in the early 1900's nearly all women breast fed. Their primary source of support included family members and midwives - most of whom were experienced nursing mothers themselves.

As breastfeeding began to decline (some time prior to World War 1 through to the 1960's) women were more likely to seek help from physicians who were trained in the "newest", "most scientific" infant feeding methods.

The availability of what appeared to be a safe alternative to breastmilk, combined with increased rights of women after World War 1, began a trend away from breastfeeding.

By the 1950's few women breast fed. Those who did, rarely did so for more than a few weeks. (Auerbach 1987:13)

The bottle in the 20th century has become a symbol of woman's freedom and of the "modern way". Sterilizing bottles and juggling the formula composition was judged easier than breastfeeding.

As the population became more mobile, the nuclear family evolved, with the young couple living away from extended family support.

Many women left home to join the workforce and the trend of women leaving home is still a reality in today's times. A woman's worth increasingly seems to be determined by her role outside of her home. Another factor that may be pushing the mother of a young baby back to work is that most of the maternity leave given is unpaid. These economic reasons that have driven many women into the marketplace have not contributed to successful breastfeeding. (Goldfarb and Tibbett 1980:20)

Ogra and Green (1982:266) concur that the effects of rapid urbanisation, overpopulation, increased participation of women in the industrial workforce and the changing concepts of family, which so typify modern day societies, have adversely affected the extent of maternal neonatal interactions as well as the process of breastfeeding.

While there was a movement away from breastfeeding in the Western world earlier this century, in recent years the trend has been reversed. Many more mothers are choosing to breastfeed at least initially. Perhaps this is due to the recent awareness of the importance of diet and health and the emphasis on natural foods. The other possible influencing factor is the concern in recent years of the emotional and psychological ramifications of the breastfeeding relationship for both mother and baby. (Houston 1981:447).

Despite this recent trend however, according to Goldfarb and Tibbetts (1980:23), Western culture has not been particularly effective in supporting breast feeding for the recommended minimum of 4-6 months.

2.2 Beneficial effects and recommended duration.

It has been shown that breastfeeding trends have varied through the ages. Numerous studies have been done depicting the art and the value of breast feeding.

For purposes of this research report, it is important to draw from some of these works to attempt to summarise and put into perspective what it is about breastfeeding that makes it unique, and therefore worthy of promotion wherever, and however possible.

As far back as 1792 Smith as quoted by Houston (1981: 449) said :

"Believe this solemn truth; almost every women is capable of supporting her babe;... when it is confined altogether to the breast, it gains strength every day and defies disease."

Mobb and Mobb (1972: 770) quote Angel Lord (1966) who said:

"In short, artificially fed babies and breastfed ones are different animals, both in their body composition and in their reactions. We can no longer say that there is no difference between the breastfed and artificially fed baby."

The American Academy of Paediatrics (1980:596) endorsed breastfeeding as the recommended way to feed an infant, unless the mother has specific health or emotional problems that contraindicate breastfeeding. Breastmilk contains just the right proportion of protein, carbohydrate, fats, vitamins and minerals to support babies' growth and development.

The Department of Health and Social Services report (1974) recommends breastfeeding for 4-6 months. During this time breastmilk provides adequate amounts of protein and calories tailored to the needs of human growth, and the infants' need for the protection provided by

breastmilk against infection and the ingress of allergens is maximal.

In celebration of the International Year of the Child, the Academy and the Canadian Paediatric Society jointly published a commentary, "Breastfeeding," with current information on the benefits of breastmilk. In a follow-up statement, intended to implement some of the recommendations in the 1978 statement, the Academy stated:

"Physicians, nurses, nursing personnel and hospitals need to examine their practises and procedures that encourage or discourage breastfeeding. The cultural attitudes and life styles of today's world tend to militate against breastfeeding. Yet, the benefits of breastfeeding to the neonate and the mother are so numerous that paediatricians must strongly encourage this practise." (American Academy of Paediatrics 1982:654)

Jeliffe, Jeliffe and Patrice (1978:406) add to this by saying that with well fed mothers and good foetal stores breastfeeding alone for 4-6 months offers the baby:-

a) excellent growth with less opportunity for infantile obesity.

b) maximum protection against cow's milk allergy, neonatal hypocalcaemia and various other metabolic disorders.

c) a supply of the unique blend of nutrients adapted to the needs of the baby, including in particular, an abundant supply of nutrients needed for growth and development of the central nervous system e.g. high lactose, cystine and cholesterol and a species specific pattern of fatty acids.

d) special opportunity for mother infant interaction.

To add an interesting dimension to this discussion Newton (1967:1185) quotes Ford (1945) who did a survey of preliterate cultures and found records of weaning ages in forty six of them.

He found that none of these cultures normally weaned any baby before 6 months, one culture weaned between 6 months and 1 year and 14 weaned between 1-2 years.

In thirty one cultures the earliest recorded age of weaning any infant from the breast was 2-3 years.

Houston (1981:449) quotes WHO (1979) which states:

"In societies where breast feeding is the cultural norm, 100% of mothers start to breast feed and 98-100% continue beyond 6 months. It is unlikely that these mothers are physiologically different from mothers in other societies where large numbers complain of 'insufficient milk'."

2.3 Recent trends in Western Countries.

While there was a movement away from breastfeeding in the Western World earlier this century due, perhaps in part to the increasing emancipation of women and in part to the availability of dried milks, in recent years the trend has been reversed.

The choice to breastfeed their own babies has been well documented in numerous studies from Sweden (Sjolin et al, 1977), London (Coles et al, 1978), U.S.A. (Auerbach, 1979), Edinburgh, (Howie and Mc Neilly, 1980) and Newcastle (Newson and Newson, 1974). (Houston 1981:447)

The American Academy of Paediatrics (1982:657) describes how breast feeding within the hospital setting reached a minimum value in 1970 when one in four mothers elected to breast feed. They go on to say that within the last decade the percentage of infants being breast fed in hospitals has increased dramatically to the point at which 60% of infants are so fed. This change is true for infants of all socio economic strata.

However, Houston (1981:447) in her paper "Breastfeeding : success or failure" presents studies which show a consistent and rapid failure of breastfeeding.

To cite a few : Martin's study (1978) quotes a figure of 50% of mothers who started to breastfeed having stopped by 6 weeks postpartum; West (1980) states that 10% of her sample of Edinburgh women had stopped within the first week and 50 % within 12 weeks postpartum. Newson and Newson (1974) in a study of 700 mothers in Nottingham found that over half of their mothers stopped breastfeeding by 4 weeks postpartum. Perhaps the lowest figures come from Arneil (1967) who reported that in that year in Scotland 69% of babies were not breastfed at all and only 5% were breastfed beyond 4 months of age.

Janke (1988 :159) quotes a more recent study in 1983 of trends in the U.S.A. showing that 61% of women were breastfeeding on hospital discharge; however, only 27% continued to breastfeed the recommended length of time. She describes research to show that there is a 32-58% breastfeeding attrition rate within the first 3-6 weeks postpartum.

In South Africa, Furman (1979:722) did a survey among a middle class group of women in Cape Town and found that 72% of mothers in the study had breastfed for an average of 4 weeks. By 6 weeks 33% had stopped and by 12 weeks 42% has stopped.

A study by Hay and Coetzer (1982:610) looked inter alia at breastfeeding patterns among urban White mothers in Pretoria. The study showed that at hospital discharge, 71% of mothers were still breast feeding. At six weeks 33% were still feeding, 21% were feeding at three months, and finally, at six months only 0,5% were still breast feeding their babies.

These studies seem to confirm Houston's view that if breast feeding is a cultural societal norm the majority of women start to breast feed and continue beyond 6 months.

2.4 Factors affecting success and duration.

2.4.1 Antenatal Factors.

2.4.1.1 Social class

The effect of social class on both the decision to breastfeed and the duration of breastfeeding is evident in a large number of studies.

Monsbach et al (1984:160) quote Winikoff and Baer (1980) who found that the most successful correlate of successful breast feeding is social class.

They also quote Martinez and Nalezienski (1979) who demonstrated that, whereas in the 30's and 40's breastfeeding was more prevalent among lower social class women, it became an accepted feeding practice in middle and upper classes in the 70's among American women.

Bax and Hart (1975:1214) on the subject of social class differences and successful breast feeding rates demonstrate social class differences. They state:

"Precisely those babies whom one would most like to see being breast fed are not being breast fed at the moment."

Houston (1981:450) in a more recent study came to a similar conclusion that women in the higher social classes breast feed and are more successful than the lower social class groups. "

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Jelliffe at Ciba Foundation Symposium (1976:116) quoted Anthony Trollope who in 1847 said :

" How is it that men's wives, who have no cold fowl or port wine on which to be coshered up, nurse their children without difficulty, whereas the wives of rich men, who eat and drink every thing that is good, cannot do so? "

2.4.1.2 Previous experience

Previous attempts to breastfeed may also affect the success rate of a current feeding experience.

Newton and Newton (1980:1181) quote Bloomfield (1962). He worked with a sample in which only 16% fed for 3 months and found that 66% of the mothers who had been this successful once repeated the performance.

Furman (1979:722) did a study among middle class mothers in a suburban Cape Town practice and found that 92% of the mothers who had breast fed their last baby said that they would do so with their next one; 78% of the patients who did not breast feed said that they would not do so with the next child.

2.4.1.3 Resources and support systems.

In most situations the mother has already come to a decision about breastfeeding prior to the delivery of the child. Therefore, the important period for providing information and supporting their decision is before the delivery takes place. (American Academy of Paediatrics 1982:658)

Dr A.K. Ladas, a New York psychologist, (1972:322) did a study on the effects of information and support on the incidence and duration of breast feeding in the U.S.A. She made the following observation :

"The decision to breast feed is affected by the general cultural attitudes toward the activity. Considering all of the pressures of an industrialised culture, advertising, the milk industry, and the lack of information in the curriculum of schools for nurses and

physicians, women are not entirely free to make the decision whether or not to breast feed. "

The findings in the study indicated that there is a significant relationship between knowledge and breast feeding. Support also relates highly to the outcome of breast feeding and information and support relate even more highly than either alone to outcome of breast feeding.

In the conclusion of the Ladas study (1972:341) an interesting observation was made with regard to the relative importance of antenatal support vs postnatal support in breast feeding success.

She said:

"It is preferable to have support both before and after breast feeding is undertaken, rather than only before or only afterwards. If a choice must be made, support before only rather than afterwards only is preferable. Accordingly, if one wishes to help a woman succeed with breast feeding she should be offered support for her desire to breast feed before the birth of the baby."

Newton and Newton (1980:1184) make the following statement in this regard:

"Many people working with mothers have a strong suspicion that the attitude of the husband, family and friends may have a real bearing on breastfeeding behaviour. However this is difficult to document. The mother is also taught, admonished and advised by a barrage of handbooks, textbooks and magazine articles on the subject of infant feeding both at antenatal and postnatal level."

The effect of medical personnel is more clearly delineated. According to Auerbach (1979:263) few physicians assume responsibility for informing the mother about and supporting her decision to breast feed. Yet, when such support and advice was provided, incidence and duration of breast feeding increased.

Furman (1979:722) did a survey of the role that doctors played in supporting and encouraging mothers to breast feed their babies. He found that one third of patients claimed that their obstetrician did not even discuss breast feeding with them and only 58% of those who did, were considered encouraging. One third of patients found their paediatricians indifferent to breast feeding.

Furman's (1979:723) conclusion was that :

"It can clearly be seen that doctors are not adequately preparing and motivating patients for breast feeding."

He further described how the majority of mothers expressed the view that doctors attending them antenatally and postnatally should be more encouraging in the advocacy of breast feeding, and that it's advantages should be stressed to a greater extent.

Newton and Newton (1980:1184) quote an example of how an enthusiastic physician can develop a practice in which the breast feeding rates of his patients are far above the usual for the rest of society. An American obstetrician in 1959 started a breast feeding programme. In two years the hospital breast feeding rate of her practise jumped from 33% to 65%, and 52% of those who started breast feeding continued for five months as compared with 15% previously.

Wirikoff and Baer (1980:105) state that minimal expressions of interest by physicians, simply inquiring whether the woman is breast feeding can make a difference.

Monsbach et al (1984:161) quote Raven and Rubin (1976) who maintain that even the mention of the topic of breast feeding by the doctor has an informative and supportive effect among some segments of the population. This can be explained in view of the high prestige and status of the specialist within our population and the strong influence

he can exert as a result of it. Patients will pay more attention to the informational content of his message than if it came from someone with a lower status.

Monsbach et al (1984:161) also discuss some of the possible reasons why breast feeding is not a subject discussed by the obstetrician. The one reason they suggest is that the obstetrician either did not consider it important or had more appropriate topics to discuss during the short visit. Another finding is that the obstetrician still believes that breast feeding belongs to the domain of the paediatrician and vice versa.

Not all mothers are exposed to an obstetrician for their antenatal management but attend clinics where they are looked after by midwives as well as doctors. The prenatal nurse can take an active role regarding breast feeding for she has contact with the mother during her pregnancy.

According to Auerbach (1979:265):

" As such, she is in the single best position to introduce the notion of breast feeding to the woman."

This involves giving complete and accurate information and being open to discussions which will help allay fears and anxieties about her choice of infant feeding methods in the future. The antenatal educator in the form of a midwife or physiotherapist may also fill this role.

Another important aspect is that the prenatal nurse/antenatal educator can provide the mother with available options of who to turn to with feeding problems after the baby is born. In the case of the antenatal educator she can fulfill the role of postnatal supporter and resource centre in the community as well.

2.4.2 Perinatal factors.

2.4.2.1 Type of labour and delivery.

Hospital events are known to affect breast feeding practices and the first issue that will be addressed here is the obstetric experience.

According to Janke (1988:159), there are studies to show that the type of delivery a women has i.e. whether she has a vaginal birth or a Caesarian section will affect her success at breast feeding.

She quotes two recent studies Procianoy (1984) and Samuels et al (1985) which reported that the incidence and duration of breast feeding were significantly lower among caesarian birth women as opposed to vaginal birth women. However, no conclusions were drawn from these two studies regarding what events surrounding the caesarian experience contributed to these findings.

Janke (1988:163) in her own study, did not support the findings of the other two studies and reported that "commitment to breast feeding" was the only common denominator between caesarian birth women and vaginal birth women.

2.4.2.2 Early contact and success

White and Thornton (1978:3) quote research done by the Medical Psychology unit at Cambridge, England which came to the conclusion that separation of mother and infant soon after birth is a major influential factor in the ultimate success or failure of a particular breast feeding relationship.

Houston (1981:450) quotes numerous studies which demonstrate the effects of early contact and suckling on future breast feeding patterns.

One such study was carried out by De Chateau and Winberg (1978) on 42 primiparous women in 1974-1975 and looked at the effect of early close contact (15 minutes of immediate skin to skin contact and suckling) compared with a control group who were given "routine care" (immediate separation for routine weighing, bathing of the baby before it was returned to a crib beside the mother's bed). It was found that full breast feeding at three months was twice as common in the early contact group as the routine group.

White and Thornton (1978:3) also quote Johnson (1976) who studied the relationship of time of initial breast feeding to success in breast feeding. She compared the experience of mothers who breast fed their babies within one hour after delivery and that of mothers who put their babies to breast sixteen hours or more after birth as dictated by routine hospital practices and found a significant relationship between success in breast feeding and early initiation of breast feeding.

Salariya et al (1978:1141) examined a sample of 111 primiparous mothers. These mothers were randomly allocated to four groups. Two groups had the baby put to the breast within 10 minutes after delivery and the other two began breast feeding 2-4 hours after delivery. One of each pair of groups fed 2 hourly and the other four hourly. Follow up over 18 months suggested that both early initiation and increased frequency of breast feeding extended the nursing period.

Taylor et al (1986:151) quote a survey that was conducted by the WHO which found a trend both in developing and developed countries toward longer breast feeding of infants who were first suckled before they were 12 hours old.

In another study Lly et al (1984:33) studied a British population and found that:

"the proportion persevering was higher among mothers who gave the first feeding shortly after delivery, fed on demand and gave few if any bottles."

A cautionary note is however added by Wright and Walker (1983:94). They also found that the prevalence rates of breast feeding during the first months were higher for British women who first suckled within twelve hours and highest for those who suckled within one hour after birth. However, they feel that there may be other factors for example age of mother, social class, educational status as well as the time of the first feed which are of significance and comment that the association between the timing of the first feeds and duration of the breast feeding experience is not a simple one.

A South African study carried out by Ransome et al (1989:431) in an urban coloured community showed that there was little difference in the breast feeding patterns of those mothers who held their babies in the first few hours of life and those who did not. They maintain that:

" This challenges the dogma that early contact, and especially early breast feeding, will promote bonding and subsequent breast feeding."

2.4.2.3 Demand feeding and success

The Salariya (1978:1141) study also highlighted the issue of frequency of the feeds relative to ultimate success rate and found that mothers who room in with their babies and demand feed, breast feed for a longer period of time than those who are separated from their babies and stick rigidly to feeding regimes.

Houston (1981:450) quotes the classic study by Illingworth and Stone (1952) which showed that demand feeding in the early days led not only to more successful breast feeding, but also less engorgement and fewer nipple problems.

Slaven and Harvey (1981 :393) write for The Lancet. "We are concerned that present midwifery practise might hinder the ability of a mother to breast feed her baby. Some maternity hospitals still follow Truby King's advice (published in 1913) to restrict the length of time the baby is allowed to suckle on the breast during the first days of life."

Their research concluded that :

"...free sucking can be added to the list of procedures such as feeding immediately after birth and frequent demand feeds which are known to improve breast feeding."

These results strongly suggest that nursing and medical staff may hinder breast feeding by prescribing an unnecessary regime of timed suckling.

According to Ladas(1972:321), there is considerable evidence in human beings that the restriction of sucking actually inhibits lactation. She quotes a study by Salber (1956) where 1057 neonates were assigned to one of three feeding groups during their hospital stay. Those on true self demand after initial weight loss, showed the most rapid weight gain and were nearest their birth weight at one week as compared to infants on scheduled feeds. Neonates on three hourly feeds were nearer their birth weight at one week as compared to the our hourly fed infants. In this same study it has been shown that artificial sucking stimulation in the form of "emptying" the breast by hand or machine where the baby is not allowed to suck more than six times a day is repeatedly recommended as a method of increasing yields.

Ladas (1972:321) also quotes a study done by McBrae which demonstrated that when Duke Hospital changed from routine separation of mother and baby to routine rooming in of baby with mother, the breast feeding rate jumped from 35% to 58.5%.

In conclusion, Janke (1988:159) states simply in her literary review :

"Research has shown that women were more successful breast feeding when 1) They had early and frequent feedings, with rooming in or demand feeding being preferable, and 2) when they avoided the use of water or formula supplements."

2.4.2.4 Hospital staff attitude and support

Thornton (1984:35) makes note of the importance of the immediate social environment of the mother with regard to breast feeding success or failure.

Ladas (1972:321) expresses the opinion that it is not innate ability but attitudes which make it difficult to breast feed today. She says:

"The mother is especially vulnerable in the first days after birth, when even one prejudiced remark can be enough to cause lactation failure."

A report from the Third International Congress in Psychosomatic Medicine in Obstetrics and Gynaecology in 1971, as reported by Mobbs and Mobbs (1972:770) emphasized that it is world wide experience that the breast feeding rate reflects the type of care and degree of understanding given by attendants, especially in the early puerperium, and that it has nothing to do with prevailing fashion.

They also make reference to an American study done by a nurse and psychologist Audrey Riker (1964), who said:

"Why is it that a mother in Pakistan will breast feed her baby for at least 12 months, and has virtually a 100% chance of success, but if a Pakistani woman migrates to England (where the methods of encouraging lactation are similar to America), her baby is likely to be removed before he reaches the age of three weeks."

Although lactation is professed to be encouraged the results are not so encouraging.

Jones and West (1985:772) did a study in order to evaluate whether employing a specially trained midwife whose role it was to assist and encourage mothers in the early days of breast feeding, would affect success rates. They were working on the premise based on previous studies, that inadequate assistance for mothers wishing to breast feed has contributed to the unacceptably high rate of premature cessation of breast feeding and consequently to the disappointment of mothers. They found in their study that it was not so much that nurses initiated feeding earlier, increased frequency of feeds or discouraged supplementary feeding, but more that they encouraged mothers and supported them with problems. By consistent advice and encouragement the nurse enabled mothers to cope more successfully with difficulties and consequently significantly fewer ended breast feeding prematurely.

Houston (1981:452) quotes a report from Nottingham (Filshie et al 1980) which highlighted the practical difficulties of implementing feeding regimes which incorporate flexible feeding times and early contact. However, the report concluded that the needs of the mothers and babies and not the hospital routine must be the priority .

Another issue that was raised in that particular survey was that of the " conflicting advice " experienced by a large proportion of women in the hospital. According to Thomson(1978), also quoted by Houston (1981:452):

Good ongoing communication, both verbal and written will drastically reduce conflicting advice , especially when carried out within a sensible, well formulated ward policy."

In an article published very recently by the South African Medical Journal entitled " Are breast feeding problems iatrogenic?", Maasdorp and Loening (1989:397) describe a survey that was carried out among 173 doctors and 169 nurses in the Natal/KwaZulu region.

The survey was carried out to assess their knowledge of some basic principles of lactation. The results showed a disturbing lack of unanimity about the management of breast feeding.

To each of the questions "How soon after normal birth should the baby be put to the breast? "and " What time schedule should the mother adhere to when breast feeding, with regard to (i) time interval between feeds; and (ii) duration on the breast? there were 19 different responses which according to the authors cannot all be right! "

They maintain that the professionals' responses suggest a wide lack of knowledge. Eighty per cent of respondents gave answers (or a combination of answers) that would have been unhelpful and confusing for the mothers. Maasdorp and Loening (1989:397) conclude that :

"Mothers need reassurance and encouragement far more than they need medication. An essential element of successful lactation is the mother's confidence in her ability to satisfy her baby's needs."

Hall (1973) as quoted by Ellis and Hewat (1983:281) studied the relevant effect of several interventions on breast feeding success in the hospital context. She found that nursing "support" consisting of encouragement, help and guidance given by the investigator for a total of 30 minutes to 2 and a half hours per patient during the hospital stay was related to the successful maintenance of breast feeding.

A survey conducted by Reiff and Essock-Vitale (1985:872) at the California University Medical Centre in Los Angeles did not however find that a positive attitude towards breast feeding necessarily led to enhanced breast feeding practices. The nursing staff strongly advocated breast feeding and did not favour any specific bottle feeding practises or products. Nursing staff counselling was generally interpreted by mothers as supporting breast feeding, but this did not deter a large proportion of

mothers who stated initial preference for breast feeding from introducing formula as a supplementary or exclusive form of infant feeding during the short study period in the hospital.

The study concluded that the hospital staff and routines exerted a stronger influence on mother infant feeding practices by non verbal teaching (the hospital "modelling" of infant formula products) than by verbal teaching (counselling supporting breast feeding). Learning through modelling was effective in shaping mothers' early infant feeding choices than learning through verbal teaching.

2.4.2.5 Home support

In the introductory chapter, it was mentioned that recent surveys in the U.S.A. have shown that almost two thirds of Americans initiate breast feeding but as many as half of them have already weaned between 2-4 weeks.

It seems that the time when a new mother comes home with her baby is also a highly critical one.

Furman (1979:722) describes in his study how 73% of the mothers breast fed initially but by 6 weeks one third had discontinued. Of these mothers, 40% stated that "there was not enough milk" or that "the milk had dried up " although there is no medical reason why lactation should cease at this early stage. Furman says:

"It is clear that there is a greater need for follow up counselling during the first weeks after delivery."

Another point which came out of his survey was that the patients were not well informed about the advantages of breast feeding. This reflects once again the importance of antenatal education as well as postnatal support in the maintenance of successful breast feeding.

In her book "The Tender Gift", Dana Raphael, an anthropologist, describes what measures have been effective in fostering breast feeding in the postpartum period in non-Western cultures. She describes how in our culture, when a baby is born the emphasis shifts from mother to baby. In the many other cultures that she studied where breast feeding is common and successful, at parturition the mother becomes a mother, keeping the emphasis on mother.

In these cultures, there is a special system of support for the new mother. They recognise that this mother must "learn" to care for her baby; it is not an assumed ability. In every culture studied by Dr Raphael, a person or persons, usually female, often a woman's mother, is assigned to the care of the mother. Her job is to "mother the mother" and Dr Raphael has called this person a "doula" or helper.

Thornton (1984:35) describes Raphael's survey of the postpartum period of 278 cultures and found that in almost all of these there was a support network for the new mother to cushion her during the critical stage which Raphael calls matrescence: that time when a woman first takes on the responsibility of motherhood. The problem is that without the supportive help the milk ejection reflex may be inhibited or may fail.

According to Goldfarb (1980:23):

"Western culture lacks this concept of "matrescence" (becoming a mother) and provides no doula."

She goes on to say that modern women are often alone in the first vital days and weeks of lactation and it is during this crucial period that the women need emotional support and correct information if they are to learn the pleasures of a nursing relationship and avoid the anguish of lactation failure.

The term "the learning period" has been aptly used to describe the first six weeks of lactation, during which the new mother is learning to breast feed. Early lactation failure, which this study and others have demonstrated to be quite common among Western societies, is, according to Goldfarb, (1980:143) often as a result of inadequate understanding of breast feeding and confusion about normal infant behaviours. They maintain that the common Western style of breast feeding by rules i.e. to hold off nursing until a given time interval makes life more difficult for mother and leads to early weaning.

The style that each mother adopts is usually based on what she learned about child rearing as she grew up, what her family, friends and people in the medical profession, or members of the breast feeding support groups are telling her now.

Human milk, with low protein, puts man among the species that need to be "continuously" fed and many Western women who do not know this fact feel that there is something wrong if they have to feed two to two and a half hourly in the first few weeks and they aim for a four hourly routine which is only really accomplished with higher protein formula feeds.

Who are the givers of support and advice in Western societies? Support, if available, may be given from any number of sources.

The father or any caring individuals in frequent contact with the mother may be of support. Here reference is made to close family relatives and friends. It is not certain however how "supportive" in real terms these individuals really are.

Professional as well as lay breast feeding support groups are available to the modern mother providing that she is aware of their existence and motivated enough to use them. Some of the services are available telephonically, while others involve attending meetings for group support.

The internationally known group that offers such services is known as The La Leche League. Also available (since 1978), in the larger cities in South Africa, is the Breast Feeding Association which trains counsellors who may be professional or lay mothers.

According to Houston (1981:452) there is a need for informed and detached professional advice. In British society, the midwife cares for the mother in the very early days following delivery, both in the hospital and at home, for the first ten days in Scotland and the first twenty eight days in Wales. The midwife is often the main provider of care, advice and professional support to the mother and her infant.

The legislation does not require a midwife to visit the home regularly during the puerperium. One visit from the local city health sister furnishes the young mother with all the information that she is required to know viz a viz the location of the clinic and the required immunisations. She is available at the clinic to render assistance where necessary and will also do home visits if there is a need but this is not routinely done.

Bax and Hart (1975:1214) in their letter to The Lancet discuss the relative merits of the appointment of a lactation nurse for the hospital and a follow up nurse for home visits.

Their argument is as follows. They say that they would be the first to applaud the appointment of "lactation nurses", but this is not enough. They maintain that about half the mothers who fail to establish full lactation

report things beginning to go wrong in the hospital. This is despite the presence of "lactation" staff. At hours when these are not present, other less experienced staff give contradictory and confusing advice.

A further group of mothers "fail" during the first 2-3 days home. They strongly feel that the best person to remedy this situation is the health visitor.

Bax and Hart (1975:214) continue by stating :

" We are now asking our health visitors to conduct antenatal discussions about breast feeding, visit the mother in the obstetric unit, and have immediate contact with the mother when she is home. We stress to the mothers that breast feeding is not fully established during their hospital stay (particularly in those babies whose mothers have obstetric medication during delivery), and reassure them that one competent friend (their health visitor) is available with help and advice throughout the whole period of lactation."

They are following up their suggestions with further research, but to date no data is available from these authors.

A study that was done in 1982 by Houston does provide us with some results on the effects of postnatal home follow up on breast feeding success rates. This study showed that a programme of structured visiting by one person based on an appointment system, produced a breast feeding rate of 100% at 12 weeks as compared to 75% of a control group. They also found that none of the structured visiting group stopped breast feeding due to the common complaint of "not enough milk". It is suggested that one of the most important factors in this study was the fact that the mothers knew to expect a visit on a certain day and therefore would tolerate their problems until help arrived.

The other point of significance made by the researchers, based more on observation and repeated remarks by the mothers, was that not only did the breast feeding rate increase but happier mothers and families in the community resulted from the knowledge that if they had problems, help - in the form of a midwife health visitor or friend - was available. (Houston 1982:452)

Another very recent study was done by Mogan (1986:103) which also showed the positive effects of professional help in the postnatal period. 118 primiparous mothers were followed up for a 6 month period postpartum. Each mother was visited six times by the nurse researcher and questioned about breast feeding-related problems and concerns. At the conclusion of the study 65% of the participants were still breast feeding. The author's speculation was that this high incidence reflected the professional support which enabled mothers to solve their problems through proper information and follow up support.

2.5 Reasons for giving up.

Many studies have focused on why women stop breast feeding.

Davies and Thomas (1976:420) found when they interviewed 32 mothers who had given up breast feeding within 3 months that by far the single commonest explanation was the belief that they were producing insufficient milk and thereby underfeeding their babies. They had sought advice from midwife, health visitor or doctor who had told them all to complement the breast feeds with milk formula or solid foods. Breast feeding stopped within 2 weeks in every case.

These findings accord with a previous study done by Hytten et al (1958:110) who showed that 64% of mothers stopped breast feeding within 3 months of delivery because their babies seemed unsatisfied with breast milk.

In Ladas's article on " How to help mothers to breast feed" (1970:703) she listed reasons why women never fed as long as they wanted to. Thirty one per cent stopped because they themselves had difficulties such as not enough milk, cracked or sore nipples or breast abcess. Twenty per cent stopped because of what they thought was intervention either by the physician or the hospital. In this category were such matters as:

(i) mother given medication to stop the milk, or medication which might harm the infant if it passed through the milk.

(ii) hospital gave baby bottles and infant lost interest in the breast.

(iii) baby brought in too tired from crying to suck.

(iv) physician said to stop.

(v) mother could not get the baby to nurse often enough to bring in the milk.

The next category was baby difficulties which accounted for 16%. These included:

(a) baby could not suck or rejected the breast.

(b) baby had diarrhea or jaundice.

(c) baby did not gain.

(d) baby lost interest in the breast.

Nine per cent stopped because of social pressure e.g. father or significant other disapproved.

The interesting aspect to this discussion as pointed out by Ladas, is the high correlation between all these aspects and information. She says:

" Lack of information is significantly related to all of the reasons why mothers stop breast feeding before they wish." (Ladas 1970:703)

Houston (1981:449) refers to some of the other studies that have been done in this area. Sjolín et al (1977) in a retrospective study of 298 mothers in Sweden, showed that by 12 weeks postpartum only 19% of women were breast feeding at all and 12 % of these were fully breast feeding. The most common reason for giving up was that "the milk dried up".

In a sample of 108 mothers in Dundee, Salyriya et al (1980) showed that 73% of mothers who stopped breast feeding before 12 weeks blamed "a poor milk supply" and a further 13% blamed an "irritable baby".

West (1980) studying a sample of 533 mothers and babies in Edinburgh, found that of the 41% who discontinued lactation before 12 weeks, 72% complained of an inadequate milk supply, unsettled baby or frequent feedings.

The last study that will be quoted is that of Newson and Newson (1974) which was a large comprehensive survey of 700 mothers in Nottingham. This showed that although 83% of mothers were still breast feeding at 1 day after birth, only 60% were still feeding at 2 weeks. Seventy two of the breast feeding failures were attributed to the "unsuitable quality" of the milk.

The South African picture appears to be much the same. Furnan (1979:722) published a study of the attitudes of middle class mothers to breast feeding. The following were his results:

Table 2.1: REASONS FOR STOPPING BREAST FEEDING (42 patients)

REASONS	%
Not enough milk/milk dried up.....	17
Baby lost interest/refused/weaned itself.....	7
Cracked nipples/lumps.....	4
Illness.....	3
Maternal.....	1
Infant.....	2
Too much strain because of an older child.....	2
Worried child not getting enough.....	2
Own convenience.....	2
Miscellaneous.....	5
Baby always hungry.....	1
Baby grew too big too quickly.....	1
Baby started to bite.....	1
6 months sufficient for good start.....	1
The "pill" caused diminished flow.....	1

The above table is an indication of the varying reasons mothers give as to why they give up feeding.

2.6 Perceived advantages and disadvantages of breast feeding.

It has been mentioned that mothers express, in general, very positive feelings about breast feeding. In Furman's study (1979:723) mothers were asked what they thought the advantages and disadvantages of breast feeding are. The following are his results:

Table 2.2: THE ADVANTAGES OF BREAST FEEDING

ADVANTAGES	%
Closer relationship between mother and baby	42%
No bottles and sterilising to worry about.....	37%
Healthier for the baby.....	23%
Protects against infection.....	27%
Protects against allergies.....	18%
Correct temperature.....	16%
Easier, more convenient.....	15%
More economical.....	15%
Good start to life.....	10%
Other reasons*	less than 10%

* Other reasons in mothers own words included: Always available on tap, enjoyable, duty of every mother, able to demand feed, time saving, uterus returns to normal size quicker, can feed any where, start solids later, get

body into shape quicker, not tied down, reach milestones at an earlier age.

Table 2.3: THE DISADVANTAGES OF BREAST FEEDING

DISADVANTAGES		
Tied down/housebound.....	32%	
Do not know how much the baby is getting.....	31%	
No disadvantages.....	26%	
Breast problems (engorgement, cracked nipples, leaking increased size).....	24%	
Other reasons*	less than 10%	

*Other reasons in the mothers own words included : Having to watch your diet, having to wear inconvenient clothing, can only feed the child yourself, have to be relaxed, toddler jealousy, if you have to take tablets for an illness, uncomfortable, first 3 months are difficult, weight increase.

2.7 Conclusion

It is clear from all the information presented in this literary review that the subject of breast feeding and factors relating to its success and failure have been extensively researched and are highly complex in nature. There are, however, common threads which run through the literature which give guidelines to workers in the field of breast feeding promotion. A positive link has been demonstrated between antenatal information and breast feeding success. Factors such as early initiation, frequent feeds in hospital and positive emotional, non conflicting support postnatally have been shown to be important. The studies that have been presented have provided guidelines for conducting the present research report.

Chapter 3

METHODOLOGY

3.1 Introduction.

This study took the form of a non experimental descriptive survey.

The aim was to conduct a preliminary investigation to collect data which will function as base line information as well as suggest ways in which breast feeding practices may be improved.

The other important function is to generate interest in further research in these areas.

3.2 Study methods.

It was decided that an effective way to collect the data would be to employ a structured interview schedule as a tool with the researcher conducting all of the interviews personally.

This was chosen rather than a questionnaire as it was felt that in a face to face situation there would be a higher response rate and the interviewer would be able to clarify and explain questions. In structuring the questions it was hoped that interviewer bias would be minimised.

3.3 Background to the formation of questions.

Many of the questions resulted from the personal work of the researcher in the field. Others resulted from meetings and discussions with colleagues and other professionals who were consulted and asked to give advice and opinions.

Studies and research projects that related to the topic were also examined together with books on the subject.

A company that specialised in drawing up questions for market research questionnaires was also consulted.

3.4 Structuring of the questions

The interview schedule was structured in such a way as to elicit responses in the following four areas:

- * pertinent demographic and biographic data.
- * general attitudes to breast feeding.
- * the source, amount and extent of antenatal, perinatal and postnatal information and support with regard to breast feeding.
- * Reasons for unsuccessful breast feeding.

In the formation of the actual questions, certain principles were established:

- * Anonymity was assured.
- * The first questions asked were simple to answer, awakened interest and did not involve responses that would lead to embarrassment: for example, age of baby, hospital delivered at.

* The order of the questions was varied so that the nature of the investigation was not obvious to the respondent. This was in an attempt to ensure that the respondents' answers were spontaneous.

* Later questions involved feelings and attitudes.

* All questions chosen were structured.

* Questions which required more complex responses were structured to incorporate a wide spectrum of possibilities. A category "other" was always added in these questions where responses could extend beyond that which was listed.

* In order to achieve a breakdown of social class for the study, a paper by Simkins and Hindson (1979) was used. In this paper the following was the breakdown:

Class I - Owners, managers and professionals

Class II - Semi-professionals, clerical, white collar, non-manual worker, and supervisors.

Class III - Skilled, semi-skilled and unskilled workers.

* The categorisation of monthly income that was operational at the time was obtained from a market research company called Camkell, Belman and Singer of Rosebank, Johannesburg. Their source of information was Market Research Africa. Patricia Whittiker was the contact person. They devise their figures from current income group base.

* See Appendix A for a copy of the interview schedule.

3.5 Preparation for data processing

A draft form of the schedule was submitted to the Department of Biostatistics at the University of Witwatersrand Medical School as they had agreed to process the data collected on their computer. It was they

who suggested that all items should be precoded to facilitate processing.

3.6 Pretest.

For pretest purposes the questionnaire was given to a number of workers in the field to elicit their comments and suggestions.

As a result of their comments and suggestions a number of changes were made to the interview schedule in the form of additions and deletions.

3.7 Pilot study.

10 women in one of the Northern Health Clinics were interviewed to determine whether the schedule was :

1. easy to administer.
2. free flowing.
3. free from ambiguities.
4. eliciting the correct type of response to the particular question.

Once the Pilot study was completed, the necessary changes to particular questions were made. This involved the rephrasing of certain questions plus the addition and elimination of others.

3.8 Bilingual Schedule.

Once the final form was obtained, the schedule was handed over to a skilled translator who translated the questions into Afrikaans.

3.9 Population.

1. White mothers with babies between the ages of 3-6 months.
2. Mothers who attend the Johannesburg Municipal Health clinics for general advice on infant care and immunisations.

3.10 Sample selection.

Clinics were visited on immunisation days, on advice of the clinic sister, as this was when many mothers with babies between 3-6 months were present.

3.11 Sample Location.

The Johannesburg municipal health clinics appeared ideal as locations because:

- * The study was limited to feeding practises among Johannesburg

municipal area White mothers and the clinics fall into this

specific area of demarcation. The clinics outside of this

municipal area were not included in the sample e.g. Sandton.

- * For purposes of this study, only the main health clinics were

utilised as they offered immunisation on a regular basis and

drew a greater population of mothers and their babies.

It was decided that all interviews would be carried out on the immunisation days. The reasons for this were:

1. There would be more babies than on routine days therefore more interviews would be possible.
2. There would be more babies of the correct age for interviewing because immunisations are carried out between 3 and 6 months.

At the outset of the study, babies who were brought to the clinics by a childminder for their immunisations were going to be followed up after hours by the researcher. This plan, however, was soon abandoned as it proved too costly and time consuming. This category of baby was therefore excluded from the study.

3.12 Sampling Size

In consultation with the Department of Biostatistics, a figure of 200 was deemed adequate for a study of this nature and purpose.

3.13 Obtaining a representative proportional sample.

The Johannesburg clinics are divided into 5 different areas of operation viz; North, South, East, West and Central. In order to obtain a representative proportional sample, the records of the number of polio vaccines utilised in the five different areas over a 3 year period were consulted. These figures were added up and divided proportionally into the 5 different areas using the chosen sample size of 200. The end result was a fixed proportional quota for each area.

3.14 Area

It can be seen from Table 3.1 that there is a similar percentage of respondents from each of the 5 areas of Johannesburg.

Table 3.1: Distribution of respondents according to area. (N=207)

AREA	n	%
North	43	21
South	48	23
East	37	18
West	40	19
Central	39	19
TOTAL	207	100

3.15 Sampling Technique.

Only mothers with babies between the ages of 3-6 months were eligible for interviewing. At any given time at the clinics, there are babies from a few days old up to approximately two years old.

Initially it was planned that to obtain the random sample, mothers with babies of the required ages would be numbered and every third mother would be interviewed i.e. systematic sampling.

During the pilot study however, it became apparent that those who were eligible for interviewing at a given point in time were few. The plan then became, whoever was in the clinic at the time that the interviewer was conducting the interviews and who had a baby of the right age formed part of the sample. Thus a convenience sample was used.

3.16 Time span.

As all the interviews were carried out personally by the researcher for reasons previously described, the interviews were conducted over a period from January 1983 until November 1984.

3.17 Permission Source.

In order for the Municipal Health clinics to be utilised for interviewing purposes, it was necessary to obtain permission from the Medical Officer of Health. A letter was sent explaining the nature of the research and its purpose.

A meeting was also held with the Chief Nursing Officer not only to obtain her permission but also to get advice. Permission was granted and a covering letter was sent to all the clinics preparing them for the arrival of the researcher.

3.18 The Interviews.

Once permission was granted by the sister in charge, mothers were initially approached to ascertain the age of their infants.

If the baby was the required age, the mother was then asked whether she would mind answering some questions on infant feeding in order for the interviewer to obtain her Masters degree in Nursing. The respondents verbal permission was thus obtained and anonymity was assured.

The respondents were generally very positive as the interviewer was dressed in her nurses uniform and face to face contact was established.

Those mothers who were Afrikaans speaking were asked the questions from the interview schedule in Afrikaans.

The interviews lasted approximately 10 minutes. They were carried out in the clinic itself, and, although this was not a private interview as such, mothers seemed to answer quite freely.

Mothers were able to withdraw from the interview if for any reason they wanted to. This only occurred on one occasion when it became apparent to the researcher that the baby was adopted.

3.19 Analysis.

The data was processed on computer and a statistical software package known only as Programme 20 of the B.M.D.P. was utilised for analysis. This package is a biomedical computer programme and provides a wide variety of analytic capabilities that range from plots and simple data description to advanced statistical techniques (Dixon 1981).

Chapter 4

RESULTS

In this chapter the results are described in two main sections

- 1) EXPLORATORY DESCRIPTIVE FINDINGS
- 2) CORRELATES OF SUCCESSFUL BREAST FEEDING

It should be noted that, as a result of rounding the individual percentages to the nearest whole number, not all percentages add up to 100.

In the case where there was a "no response" to a question, the figures have been left out of the tables.

4.1 Exploratory descriptive findings

This section of descriptive findings includes factors such as demographic and biographical factors as well as factors linked to the antenatal period, the perinatal period and the postnatal period.

4.1.1 Analysis of demographic and biographical variables

4.1.1.1 Home language

The sample of respondents is composed of approximately two thirds English speaking mothers (67%), with the remainder Afrikaans and foreign speaking mothers (22% and 11%) respectively.

Table 4.1: Distribution of respondents according to home language (N= 207)

<u>LANGUAGE</u>	<u>n</u>	<u>%</u>
English	139	67
Afrikaans	45	22
Other	23	11
<u>Total</u>	<u>207</u>	<u>100</u>

4.1.1.2 Marital status

The majority of mothers (93%) were married at the time of the interview. Only a small percentage of mothers were single or divorced 6% and 1% respectively. There were no widowed or separated mothers.

Table 4.2: Distribution of respondents according to marital status. (N =207)

<u>MARITAL STATUS</u>	<u>n</u>	<u>%</u>
Married	193	93
Single	12	6
Divorced	2	1
<u>Total</u>	<u>207</u>	<u>100</u>

4.1.1.3 Family structure

The overall majority of the respondents (89%) were living on their own as a couple with their offspring. Only 8% were residing with parents or parents - in - law and 3% were not living with husband or family, but alone with their babies.

Table 4.3: Distribution of whom respondents were living with at the time of the interview. (N=207)

<u>WHO LIVING WITH</u>	<u>n</u>	<u>%</u>
As a couple	184	89
Husband & Parents	8	4
Husband & In Laws	4	4
Alone	7	3
<u>Total</u>	<u>207</u>	<u>100</u>

4.1.1.4 Number of children

It was found that just over half (53%) of those interviewed were first time mothers. Twenty seven percent had 2 children and the rest had more than 2 children. Only one person interviewed had 5 children.

Table 4.4: Distribution of number of children in the family.(N=207)

<u>NUMBER OF CHILDREN</u>	<u>n</u>	<u>%</u>
1	110	53
2	55	27
3	33	16
4	8	4
5	1	0
<u>Total</u>	<u>207</u>	<u>100</u>

4.1.1.5 Hospital where delivered

The majority of Johannesburg mothers (57%) delivered in private hospitals. Of the provincial hospitals, almost half delivered at the Johannesburg Hospital.

Table 4.5: Distribution of hospitals at which babies were born. (N =207)

<u>HOSPITAL</u>	<u>n</u>	<u>%</u>
PROVINCIAL	90	43
PRIVATE	117	58
<u>TOTAL</u>	<u>207</u>	<u>100</u>

4.1.1.6 Success linked to previous children

Forty seven per cent of the mothers interviewed were multiparous. Of those, just under half (46%) had fed other children for 3 months or more while slightly more than half (54%) did not successfully breast feed a previous baby.

Table 4.6: Distribution of success at breast feeding of previous babies. (N =90)

<u>DURATION FED</u>	<u>n</u>	<u>%</u>
3 months	41	46
<3 months	49	54
<u>Total</u>	<u>90</u>	<u>100</u>

4.1.1.7 Age of the mother

The ages of the mothers interviewed ranged from 17 to 40. The mean age was 26.5 years with a standard deviation of 5.1 years. The ages of just over half of the mothers (54%) fell between 21 and 30 years of age. The results show that over 30 years there is a definite decline in number of babies born decreasing steadily until 40 years.

Table 4.7: Distribution of the ages of the mothers interviewed (N=207)

<u>AGE OF MOTHER</u>	<u>n</u>	<u>%</u>
17-20	23	11
21-24	59	29
25-28	58	28
29-32	38	18
33-36	19	9
37-40	10	5
<u>Total</u>	<u>207</u>	<u>100</u>

4.1.1.8 Social class

Figure 4.1 shows that there were almost the same number of people interviewed from Class 1 (owners, managers and professionals) as there was from Class 2 (semi professionals, clerical and white collar) 42% and 41% respectively. The lowest class, Class 3, was represented by only 17%. This class breakdown was obtained from a paper by Simkins and Hindson (1979:4)

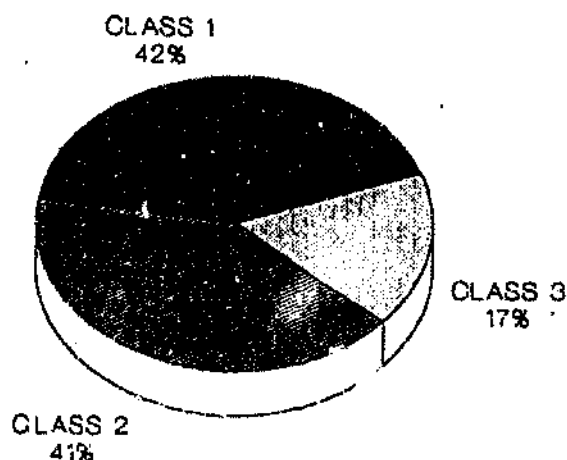


Figure 4.1: Distribution of Social Class (N=207)

4.1.1.9 Income

Consistent with the categorisation of people into classes, the breakdown of income level of respondents showed nearly 80 % were earning more than R1 100 per month in 1981. These respondents would belong to class 1 and 2 whereas respondents earning less than R400 in 1981 (20 %) came mainly from Class 3.

Table 4.8: Distribution of Monthly Incomes (N=207)

<u>MONTHLY INCOME</u>	<u>n</u>	<u>%</u>
R1 800+	98	47
R1 100 - R1 799	67	32
R400 - R1 099	34	16
Less than R400	8	4
<u>Total</u>	<u>207</u>	<u>100</u>

4.1.2 Factors linked to antenatal period

In this subsection factors linked to the antenatal period are discussed.

4.1.2.1 Who attended to the mothers while pregnant

From table 4.9 it can be seen that in this study the majority of women (62 %) were attended by an obstetrician during their pregnancy and delivered privately.

Table 4.9: Distribution of attendants utilised by the sample while pregnant. (N = 207)

<u>ATTENDANT</u>	<u>n</u>	<u>%</u>
Obstetrician	129	62
G.P.	23	11
Doctor at hospital	45	22
Midwife at hospital	10	5
<u>Total</u>	<u>207</u>	<u>100</u>

4.1.2.2 Antenatal advice on breast feeding

Just over half of the sample responded that they had received some antenatal advice on breast feeding (54 %). However, almost half (45%) said that they had received no information at all about breast feeding while pregnant with their last baby.

Table 4.10: Distribution of those mothers according to whether antenatal advice on breast feeding was received. (N=207)

<u>RECEIVED ADVICE</u>	<u>n</u>	<u>%</u>
Yes	111	54
No	96	46
<u>Total</u>	<u>207</u>	<u>100</u>

Of those 54% who did receive antenatal advice on breast feeding, the largest percentage (39%) said that they had received information from an antenatal therapist who is either a midwife or physiotherapist. The next largest group were those who said that they had obtained information from the media (26%) and those who said that the sister at the hospital clinic had given them some advice and information (24%). Only 2% of women obtained information from their General Practitioner, while only 1% from their Obstetrician. There was a group of 8 % who had received information from sources other than the ones mentioned.

Table 4.11: Distribution of the sources of antenatal information (N = 111)

<u>SOURCE</u>	<u>n</u>	<u>%</u>
Antenatal teacher	43	39
Media	29	26
Sister at hospital clinic	27	24
G.P.	2	2
Obstetrician	1	1
Other	9	8
<u>Total</u>	<u>111</u>	<u>100</u>

4.1.2.3 Expressed desire to breast feed

There was an overwhelmingly positive response to the issue of aspiring in pregnancy to breastfeed. Eighty six per cent of the respondents said retrospectively that they had definitely wanted to breastfeed at the end of their pregnancy. A few had mixed feelings or stated that they did not want to feed. (6 and 8 % respectively).

Table 4.12: Distribution of expressed desire to breastfeed at the end of last pregnancy. (N=207)

<u>EXPRESSED DESIRE</u>	<u>n</u>	<u>%</u>
Definitely wanted to feed	178	86
Did not want to feed	17	8
Mixed feelings	12	6
<u>Total</u>	<u>207</u>	<u>100</u>

4.1.2.4 General attitude to breastfeeding

Attitudes towards breast feeding babies in general was assessed. Consistent with the aspirations of these women to feed their own babies, most women (76 %) said that it was extremely important and a further 17 % regarded breast feeding as fairly important. Only 7 % had negative feelings.

Table 4.13: Distribution of the expressed importance of breast feeding a baby. (N = 207)

<u>IMPORTANCE</u>	<u>n</u>	<u>%</u>
Extremely Important	157	76
Fairly Important	36	17
Not Very Important	12	6
Not Important at all	2	1
<u>Total</u>	<u>207</u>	<u>100</u>

4.1.2.5 Advantages to the mother

Almost half (47 %) of the respondents perceived the main and only advantage of breast feeding to mothers as convenience. While almost one third (31 %) considered the mother/child relationship to be most important. Few respondents mentioned factors such as restoring her figure and preventing cancer as the main advantage of breast feeding (5 % and 1 % respectively). Only a third (33%) of respondents gave a second advantage to the mother of breast feeding. Of these almost half (46 %) gave as their second reason mother/child relationship.

Table 4.14: Distribution of main and second advantages to the mother of breast feeding her baby. (N=207 and N=68)

ADVANTAGE	MAIN		SECOND	
	n	%	n	%
Convenience	96	47	14	20
Good for relationship	64	31	31	46
Restores her figure	11	5	13	19
Prevents Ca breast	4	1	1	2
Other	32	16	9	13
Total	207	100	68	100

4.1.2.6 Advantages to babies

The ideal properties of breast milk was considered by 61 % of mothers to be the main and only advantage to breast feeding. The mother/child relationship was considered by a further 24% to be the most important advantage to the baby. This reason was cited by a similar proportion of respondents as the most important advantage to the mother. Few mothers considered convenience, prevention of allergies and jaw development to be the primary advantage to the baby. (5 %, 6 % and 1 % respectively).

Table 4.15: The most important advantages to the baby of being breast fed. (N=174 and 138)

ADVANTAGE	MAIN		SECOND	
	n	%	n	%
Ideal food	125	61	43	31
Good for relationship	24	24	37	27
Less allergies	13	6	50	36
Convenient	5	5	6	4
Encourages good				.
Jaw development	2	1	1	1
Other	5	3	1	1
TOTAL	174	100	138	100

Of the mothers expressing a second advantage to the baby of breast feeding, almost two thirds (67%) cited prevention of allergies and ideal food as important to the baby and a further 27% felt it was good for the mother/child relationship.

4.1.2.7 Disadvantages of breast feeding

Over one third of mothers (36 %) did not feel that there were any disadvantages associated with breast feeding. Another third (33%) considered breast feeding to be restrictive, while the remainder cited reasons such as tiring, and inability to assess amount of feed as the main disadvantage. Only 13 % of respondents cited a second disadvantage to breast feeding.

Table 4.14: Distribution of perceived disadvantages of breast feeding. (N = 207)

<u>MAIN DISADVANTAGES</u>	<u>n</u>	<u>%</u>
None	74	36
Restrictive	68	33
Can't tell how much		.
Baby is getting	20	10
Tiring	8	4
Other	37	17
<u>Total</u>	<u>207</u>	<u>100</u>

4.1.3 Perinatal factors

In this section factors relating to the labour, birth and delivery and the days immediately following the birth will be presented.

4.1.3.1 Type of delivery

Approximately three quarters of all deliveries (76%) were either normal vaginal deliveries (59%) or forceps/vacuum deliveries (17%). Caesarian section accounted for the other 24% of deliveries.

Table 4.17: Distribution of delivery type (N=207)

<u>DELIVERY TYPE</u>	<u>n</u>	<u>%</u>
Normal vaginal delivery	122	59
Caesarian Section	50	24
Forceps/Vacuum	35	17
<u>Total</u>	<u>207</u>	<u>100</u>

4.1.3.2 Gestational age

There were very few premature babies reported in this study (8%).

The vast majority were full term babies.

Table 4.18: Distribution of gestational age (N=207)

<u>AGE</u>	<u>n</u>	<u>%</u>
Full term	190	92
Premature	17	8
<u>Total</u>	<u>207</u>	<u>100</u>

4.1.3.3 The first breast feed after delivery

In this study approximately a quarter (24%) of the mothers said that they fed their babies within the first hour after delivery. Eleven per cent fed between one and three hours. Approximately one quarter (23%) fed between three and eleven hours and a further 29% fed after 11 hours. Fourteen per cent did not attempt to breast feed at all.

Table 4.19: Distribution of first feed after birth (N=207)

<u>TIME OF FIRST FEED</u>	<u>n</u>	<u>%</u>
Within 1 hour	50	24
1 - 3 hours	22	11
3 - 8 hours	37	18
8 - 11 hours	11	5
11 + hours	59	29
Did not feed	28	13
<u>Total</u>	<u>207</u>	<u>100</u>

4.1.3.4 Rooming in

The majority of mothers did not practice rooming in (59%) while 41% of mothers said that their babies spent most of the day and night with them in the hospital.

Table 4.20: Distribution of mothers who roomed in with their babies. (N=207)

<u>ROOMING IN</u>	<u>n</u>	<u>%</u>
No	123	59
Yes	84	41
<u>Total</u>	<u>207</u>	<u>100</u>

4.1.3.5 Night feeds

Two thirds (66%) of the mothers reported that they breast fed their babies after 2300 hours and before 0500 hours in the hospital. Only one third (34%) said that they slept through the late night and early morning feeds and did not breast feed their babies at these times.

Table 4.21: Distribution of mothers who breast fed at night (N=206)

<u>BREAST FED AT NIGHT</u>	<u>n</u>	<u>%</u>
Yes	137	66
No	70	34
<u>Total</u>	<u>207</u>	<u>100</u>

4.1.3.6 Demand versus fixed feeding schedule in hospital

When asked whether their babies were fed on demand or not, it can be seen from the above table that 41% of the respondents did not feed at rigid feeding times but according to the demands of the baby. The remainder (59%) said that they fed at fixed feeding times, in other words at times when the hospital schedule dictated and not the baby.

Table 4.22: Distribution of demand versus fixed feeding schedules (N=207)

DEMAND FED	n	%
Yes	84	41
No	123	59
Total	207	100

4.1.3.7 Nursing staff attitude to breast feeding

Approximately two thirds of the mothers expressed extremely positive or quite positive opinions as to the helpfulness of the nursing staff towards breast feeding 61% and 15% respectively.

The remainder of the sample were either not positive or not concerned about the attitudes of the nursing staff 22% and 2% respectively.

Table 4.23: Distribution of how mothers perceived hospital staff's attitude to breast feeding (N=206)

ATTITUDE	n	%
Very Helpful	125	61
Quite Helpful	33	15
Not so Helpful	30	15
Not Helpful at all	15	7
Not Applicable	4	2
Total	207	100

4.1.3.8 Negative attitude or handling from hospital staff

Respondents were asked whether there was anything in the hospital or with the staff that they found unhelpful or harmful with regard to breast feeding. In Table 4.24 it can be seen that almost 3/4 of the respondents (71%) found nothing to complain about while the remainder were dissatisfied in some way.

Table 4.24: Distribution of patients perception of staff attitude and patient care (N=203)

<u>NEGATIVE STAFF/HOSPITAL HANDLING</u>	<u>n</u>	<u>%</u>
No	144	71
Yes	59	29
<u>Total</u>	<u>203</u>	<u>100</u>

4.1.3.9 Manifestation of negative staff management

The women who expressed dissatisfaction cited : No support (26%), hospital routine (25%), or lack of supervision (23%) as the main reasons.

Table 4.25: Distribution of reasons respondents gave for why they found staff and hospital unhelpful or harmful. (N=53)

<u>REASON</u>	<u>n</u>	<u>%</u>
No support or encouragement	14	26
Hospital Routine	13	25
Lack of supervision/assistance	12	23
Rough Handling/negative advice	6	11
Other	8	15
<u>Total</u>	<u>53</u>	<u>100</u>

4.1.3.10 Feeding on discharge

At discharge from hospital most of the respondents (80%) were breast feeding fully while (4%) were partially breast feeding. The remainder (16%) were fully bottle feeding at the time of discharge.

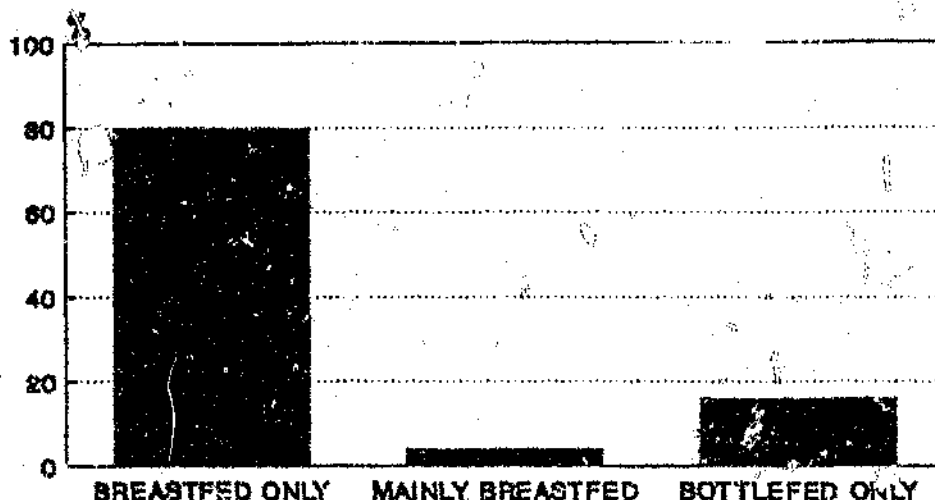


Figure 4.2: Percentage of respondents breast feeding on discharge.

Table 4.26: Distribution of how respondents were feeding on discharge from hospital (N=206)

FEEDING ON DISCHARGE	n	%
Breast fed only	165	80
Bottle fed only	33	16
Breast fed & occasionally bottlefed	8	4
Total	206	100

4.1.4 Postnatal factors

In this section, factors that are relevant to being home with a new baby and breast feeding are examined briefly.

4.1.4.1 Frequency of breast feeds in the first weeks home

When home with their babies only (21%) of the mothers reported having fed their babies two to two and a half hourly. More than three quarters reported intervals of three to four hours between feeds. A mere (1%) claimed interfeed intervals of more than four hourly.

Table 4.27: Distribution of frequency of feeds in the first 6 weeks home.(N=173)

<u>FREQUENCY OF FEEDS</u>	<u>n</u>	<u>%</u>
2 - 2 1/2 hours	36	21
3 - 3 1/2 hours	74	43
4 hourly	60	35
> 4 hourly	3	1
<u>Total</u>	<u>173</u>	<u>100</u>

4.1.4.2 Need for support at home

When asked whether they felt the need for more support when at home with the baby, approximately two thirds of the sample (64%) felt that they did not need more support. The other mothers,(36%) did however feel that they needed more home support with breast feeding.

Table 4.28: Distribution of those who felt the need for postnatal home support in breast feeding. (N=207)

<u>NEEDED MORE SUPPORT</u>	<u>n</u>	<u>%</u>
No	132	64
Yes	75	36
<u>Total</u>	<u>207</u>	<u>100</u>

4.1.4.3 Source of support

Of the 74 respondents who felt the need for more home support, over half (58%) could not specify from whom they would have appreciated the support. The clinic sister and the maternal mother were cited as desired sources of support 15% and 16% respectively, while doctors, husbands and friends were infrequently cited.

Table 4.29: Distribution of whom respondents felt they would appreciate more home support. (N=73)

<u>FROM WHOM SUPPORT</u>	<u>n</u>	<u>%</u>
Mother	12	16
Clinic sister	11	15
Husband	2	3
Friends	2	3
Obstetrician	2	3
Paediatrician	1	1
Other	43	58
<u>Total</u>	<u>73</u>	<u>100</u>

4.1.4.4 Husband's attitude

It can be seen from the table that 45% of the respondents felt that their husbands were extremely positive and supportive of their breast feeding attempts. A further 28% felt that their husbands were quite positive and supportive. On the negative side 25% felt that their husbands were not supportive or positive.

Table 4.30: Distribution of how respondents perceived their husbands attitude and support of breast feeding. (N=202)

<u>ATTITUDE</u>	<u>n</u>	<u>%</u>
Extremely positive and supportive	94	45
Quite positive and supportive	58	28
Not very positive and supportive	28	14
Not positive and supportive at all	22	11
<u>Total</u>	<u>202</u>	<u>100</u>

4.1.4.5 Who influenced most

The sample of mothers who are considered successful breast feeders were asked retrospectively who they thought had influenced them to breast feed their babies. More than half of the mothers (59%) said that it was from self motivation and desire that they had breast fed successfully. No other person or group of people seemed to have played a major role.

Table 4.31: Distribution of whom the successful mothers felt influenced them most to breast feed.(N=100)

WHO/WHOM INFLUENCED	n	%
Self	59	59
Mother	8	8
Husband	7	7
Friends	5	5
Media	5	5
G.P.	3	3
Nursing staff at hospital	3	3
Obstetrician	2	2
Paediatrician	1	1
Mother-in-law	0	0
La leche league/BFA	0	0
Other	7	7
Total	100	100

4.1.4.6 Sources of advice for problems

The successful mothers were asked to whom they turned first when they had breast feeding problems. Almost half of the mothers (43%) said that they turned to the sister of the Health Clinics. A further 12% said that they would turn to their own mothers. The rest of this sample, less than 10% in each case, cited other people as listed in the following table.

Table 4.32: Distribution of whom successful mothers turned to with problems. (N=100)

WHO TURN TO WITH PROBLEMS	n	%
Sister at the Health Clinic	43	43
Mother	12	12
G.P.	7	7
Paediatrician	7	7
Friends	7	7
Husband	5	5
La Lache League/BFA	5	5
Mother-in-law	2	2
Obstetrician	1	1
Other	11	11
Total	100	100

4.1.4.7 Duration of breast feeding after introduction of bottle

The bottle feeding mothers or "unsuccessful" breast feeders were asked how long it took them to wean from breast to bottle. The majority of these mothers (63%) stopped breast feeding immediately. A further (26%) continued for 1 week to 2 weeks while only 11% weaned from breast to bottle over 3 weeks or more.

Table 4.33: Distribution of continued breast feeds after introduction of bottle. (N=107)

HOW LONG BREAST FEEDS	n	%
Stopped immediately	67	63
1 week	15	14
2 weeks	13	12
3 weeks or more	12	11
Total	107	100

4.1.4.8 Reasons for giving up breast feeding

Almost half (45%) of the bottle feeding sample cited "insufficient milk" as the main reason for giving up breast feeding. Varied other reasons were given including physical complications to the mother (14%) and no enjoyment (9%).

Table 4.34: Distribution of reasons why mothers gave up breast feeding. (N=107)

REASONS	n	%
Not enough milk	49	45
Physical complications	15	15
No enjoyment	10	9
Going back to work	7	7
Baby not gaining	5	5
Baby too demanding	5	5
Too many pressures	4	4
Exhaustion	3	3
Other	9	8
Total	107	100

4.1.4.9 Who influenced decision to bottle feed

When asked who influenced their decision to bottle feed babies, more than two thirds of the bottle feeding mothers (68%) said that they had made the decision of their own volition to give up breast feeding. A further 12% were influenced by medical sources such as General Practitioners, Obstetricians and Paediatricians. Family members and friends influenced the decision to bottle feed in 9% of cases.

Table 4.35: Distribution of persons who influenced mothers to bottle feed.(N =100).

WHO INFLUENCED	n	%
Self	68	68
Paediatrician	8	8
G.P.	6	6
Sister at Clinic	6	6
Obstetrician	3	3
Mother	3	3
Mother- in - law	2	2
Husband	2	2
Friends	2	2
Total	100	100

4.2 Correlates of successful breast feeding

In this section the correlates of successful breast feeding will be discussed and presented.

4.2.1 Home language

The English speaking population of Johannesburg are more likely to breast feed successfully than the Afrikaans or foreign speaking population as can be seen from Table 4.36.

More than half of the English speaking sample (58%) successfully breast fed compared to 24% and 39% in the Afrikaans and foreign speaking languages respectively ($\chi^2 = 15.8$; $df = 2$; $p < 0,005$).

Table 4.36: Cross Tabulation of home language and breast feeding success. (N=207)

LANGUAGE	BREAST (n=100)		BOTTLE (n=107)		ROW TOTAL
	n	%	n	%	n
ENGLISH	80	58	59	42	139
AFRIKAANS	11	24	24	76	45
OTHER	9	39	14	61	23

4.2.2 Previous Experience

A previous experience of successful breast feeding is positively related to subsequent breast feeding success ($\chi^2 = 26.34$; $df = 1$; $p < .001$).

Figure 4.2 shows that 70% of those who previously successfully breast fed, subsequently breastfed.

However, only 16% who did not previously breast feed successfully managed to breastfeed their next baby.

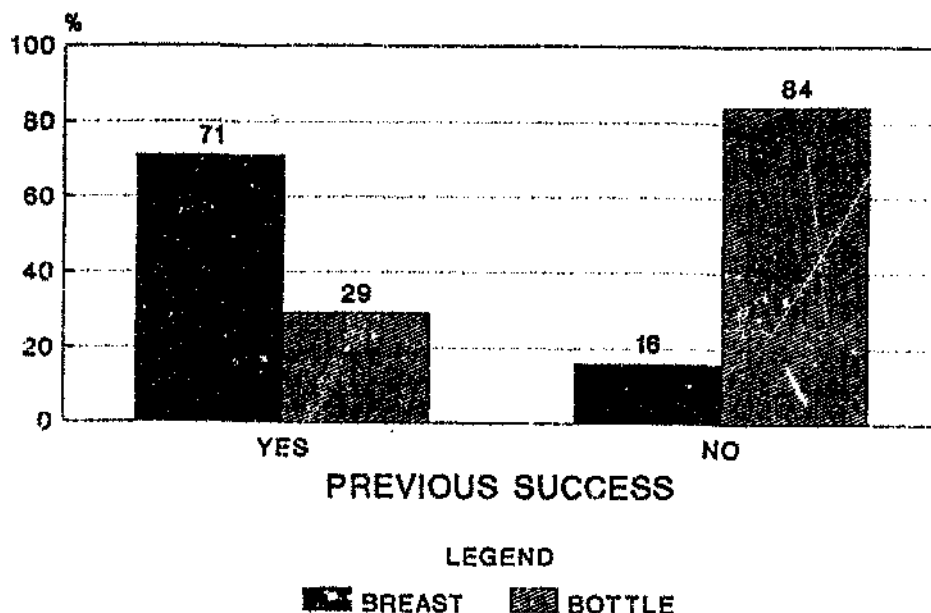


Figure 4.3: Percentage of successful breast feeders according to previous success.

4.2.3 Social Class

Social class is another factor associated with breast feeding success. The study demonstrates that, whereas in the highest class, Class I, (owners, managers and professionals) more than two thirds of the mothers breast feed, in classes II (semi professionals, clerical, white collar) and III (skilled, semi skilled and unskilled) 38% and 23% respectively were successful (chi sq=26.51; df=2; $p < .001$).

Table 4.37: Cross tabulation of social class and breast feeding success.(n=207)

SOCIAL CLASS	BREAST (n=100)		BOTTLE (n=107)		ROW TOTAL
	n	%	n	%	n
Class I	60	68	28	32	88
Class II	32	38	52	62	84
Class III	8	23	27	77	35

4.2.4 Income

Consistent with the findings on social class it is found that the percentage of successful breast feeders drops as income decreases. While over half of mothers in the two higher income categories are successful (58% and 53% respectively), only 19% of mothers in the lower category (< R400 per month) are successful (chi sq=18.9; df=2; $p<.0005$).

Table 4.38: Cross tabulation of income and breast feeding success. (N=207)

INCOME	BREAST (n=100)		BOTTLE (n=107)		ROW TOTAL
	n	%	n	%	n
R1 800 +	57	58	41	42	98
R1 000 -	35	53	32	47	67
R 400	8	19	34	81	42

4.2.5 General attitude to breast feeding

The mothers were asked to rate how important, in general, they thought breast feeding was for babies. A significant relationship emerged between expressed feelings and action. Over half of the mothers who regarded breast feeding as extremely important, 58% successfully breast fed (chi sq=26.8; df=2; $p<.0001$).

Twenty five percent of mothers who regarded breast feeding as fairly important were successful breast feeders. None of the mothers who regarded it as unimportant successfully breast fed.

Table 4.39: Cross tabulation of mothers attitude to breast feeding and success at breast feeding. (N=207)

HOW IMPORTANT	BREAST (n=100)		BOTTLE (n=107)		ROW TOTAL
	n	%	n	%	n
EXTREMELY	71	58	66	42	157
FAIRLY	9	25	27	75	36
UNIMPORTANT	0	0	14	100	14

4.2.6 Effect of antenatal information

There is a greater chance for a woman to breast feed her baby successfully if she receives antenatal information on breast feeding (chi sq=13.9; df=1; $p<0.005$).

Of those who received antenatal information, more than half (60%) successfully breast fed their babies. This percentage decreased to 34% in the case of women who received no antenatal information on breast feeding.

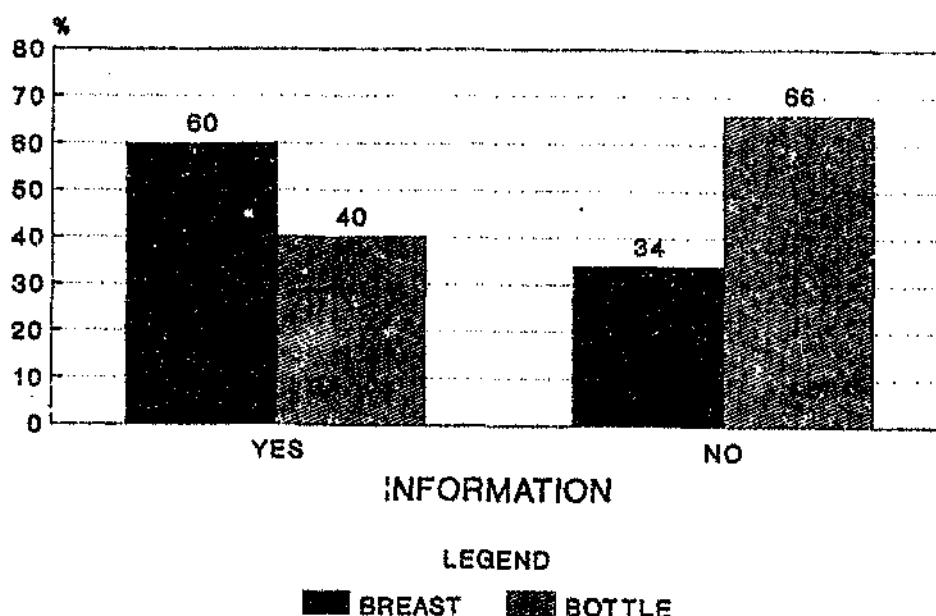


Figure 4.4: Percentage of successful breast feeding according to whether antenatal information is received.

4.2.7 Source of antenatal information

Mothers who receive information from an antenatal therapist have the highest probability of breast feeding (86%) compared to those exposed to information from the media (61%). Mothers who received information from the sisters working in the hospital antenatal clinics have a 33% chance of breast feeding while none of the 3% who received information from medical sources were successful (chi sq=19.34; df=2; p<.0001).

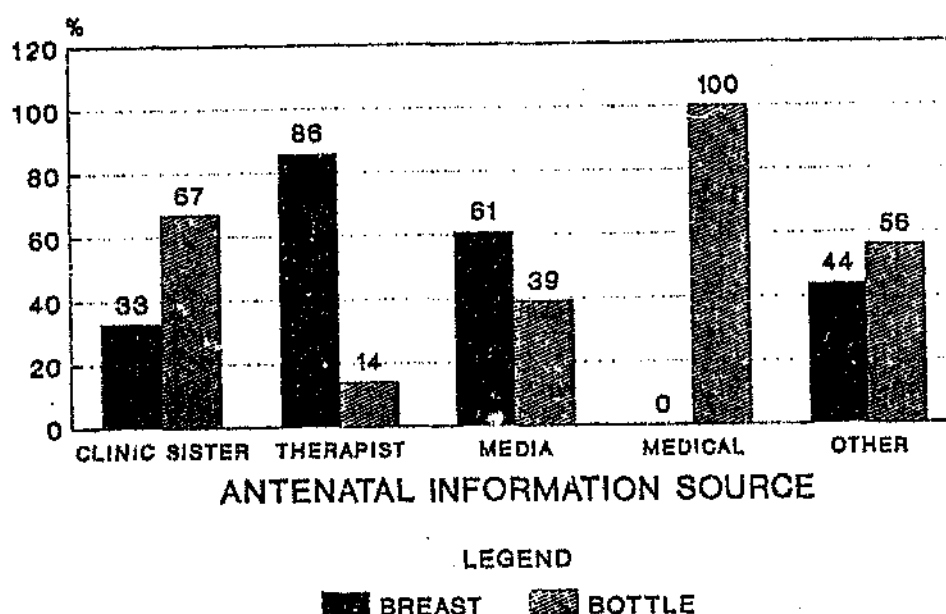


Figure 4.5: Percentage of successful breast feeding according to source of antenatal information.

4.2.8 Expressed desire to breast feed and success

There is a significant relationship between those women who said that they had definitely wanted to breast feed by the end of the pregnancy and those who went on to successfully breast feed (chi sq=19.2; df=2; p<.0001). Of those who successfully breast fed over half (54%) said that they had felt a definite desire to breast feed by the end of the pregnancy. One third of the sample (33%) expressed mixed feelings but went on to feed successfully. Of the mothers who did not want to breast

feed by the end of their pregnancies none were successful.

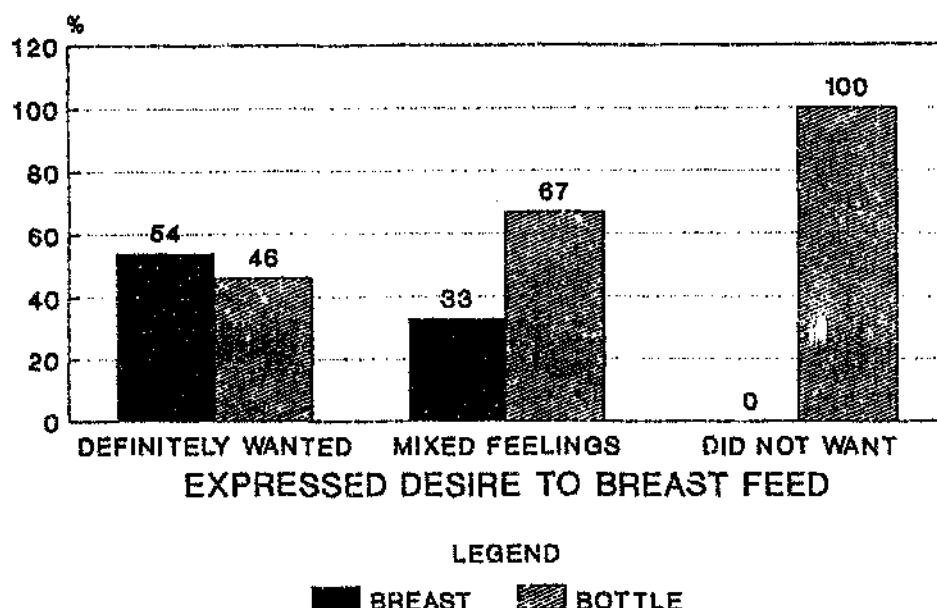


Figure 4.6: Percentage of successful breast feeding according to expressed desire at end of pregnancy

4.2.9 Hospital where delivered

There is a significant difference in breast and bottle feeding practices between those mothers who delivered in the Provincial Hospitals and those who delivered privately (chi sq = 10.8; df =1; $p < 0.001$). Just over half (55%) of those who delivered in Private Hospitals fed successfully, compared with only one third (33%) of mothers from Provincial Hospitals.

Table 4.40: Cross tabulation of success at breast feeding and hospital where delivered.

HOSPITAL	BREAST (n=100)		BOTTLE (n=107)		ROW TOTAL
	n	%	n	%	n
PROVINCE	25	32	54	68	79
PRIVATE	70	55	57	45	127

4.2.10 Type of delivery

Whether the babies were delivered vaginally or via Caesarian Section has no effect on the success or lack of success of the future breast feeding experience (chi sq=.141; df=1; p=>.05).

Table 4.41: Cross tabulation of type of delivery and breast feeding success.(N=207)

TYPE OF BIRTH	BREAST (n=100)		BOTTLE (n=107)		ROW TOTAL
	n	%	n	%	n
NORMAL OR FORCEPS	77	49	80	51	157
CAESARIAN SECTION	23	46	27	54	50

The percentage of successful breast feeders is similar for both normal vaginal deliveries and Caesarian sections, 49% and 46% respectively.

4.2.11 Gestational age.

There is no relationship between gestational age and success at breast feeding (chi sq=.88; df=1; p>.05).

Table 4.42: Cross tabulation of gestational age and breast feeding success.(N=207)

TYPE OF DELIVERY	BREAST (n=100)		BOTTLE (n=107)		ROW TOTAL
	n	%	n	%	n
FULL TERM	92	48	98	52	190
PREMATURE	8	47	9	53	17

4.2.12 The first breast feed after delivery

There is no significant relationship between how soon the baby is fed after birth and successful breast feeding (chi sq= 4.34; df=3; p>.05). Mothers who fed within 8 hours after birth are more often successful breast

feeders than not. While those mothers who feed at least 8 hours after the birth tend to bottle feed slightly more often than breast feed.

Table 4.43: Cross tabulation of the first breast feed after delivery and breast feeding success. (N=207)

TIME	BREAST (n=100)		BOTTLE (n=107)		ROW TOTAL
	n	%	n	%	n
Within 1 hour	31	62	19	38	50
1 -3 hours	13	59	9	41	22
3 -8 hours	23	62	14	38	37
8 + hours	32	46	38	54	70
Did not feed	0	0	28	100	28

4.2.13 Rooming in

No significant relationship was demonstrated between those mothers who roomed in with their babies in the hospital and successful breast feeding (chi sq=1.7; df=1; $p>.05$).

Table 4.44: Cross tabulation of rooming in and breast feeding success. (N=207)

ROOMING IN	BREAST (n=100)		BOTTLE (n=107)		ROW TOTAL
	n	%	n	%	n
YES	36	43	48	57	84
NO	64	52	59	48	123

It is interesting to note that the percentage of successful breast feeders, though very similar for mothers who roomed in with their babies or did not, is slightly lower (43% versus 52%) for those who did not room in.

4.2.14 Night feeds

There was also no significant relationship demonstrated between those mothers who fed their babies at night and successful breast feeding ($\chi^2=1.3$; $df=1$; $p>.05$)

Though the percentages are similar, there is a higher percentage of breast feeding mothers who feed at night i.e. between 2300 hours and 0500 hours compared to those who did not. (52% versus 43%)

Table 4.45: Cross tabulation of night feed in the hospital and breast feeding success. (N=207)

	BREAST (n=100)		BOTTLE (n=107)		ROW TOTAL
	n	%	n	%	n
AT NIGHT					
YES	70	52	67	49	137
NO	30	43	40	57	70

4.2.15 Demand versus fixed feeding schedule

Demand feeding in the hospital is not significantly correlated to successful breast feeding ($\chi^2=2.0$; $df=1$; $p>.05$).

In the case of those who fed on demand slightly under half (43%) fed subsequently as opposed to (53%) of those with fixed feeding schedules.

Table 4.46: Cross tabulation of demand versus fixed feeding schedule and breast feeding success. (N=207)

	BREAST (n=100)		BOTTLE (n=107)		ROW TOTAL
	n	%	n	%	n
SCHEDULE					
ON DEMAND	36	43	48	57	84
FIXED	65	53	58	47	123

4.2.16 Feeding on discharge

Mothers who are discharged from the hospital breast feeding their babies have a significantly greater chance of successfully feeding their babies than those who were already bottle feeding at discharge (chi sq=36.35;df=1;p<.0005).

Table 4.47: Cross tabulation of breast feeding on discharge and success at breast feeding.(N=207)

HOW DISCHARGED	BREAST (n=100)		BOTTLE (n=107)		ROW TOTAL
	n	%	n	%	n
BREAST FEEDING	100	57	74	43	174
BOTTLE FEEDING	0	0	33	100	33

Of the mothers who were discharged breast feeding over half (57%) continued to breast feed for at least 3 months while (43%) did not.

4.2.17 Nursing staff attitude to breast feeding

This is a significant relationship. When the hospital staff attitude is perceived by the mother as supportive, over half of mothers (52%) breast feed whereas only (37%) breast feed when the attitude of the staff is perceived by the mother as unhelpful (chi sq=3.59;df=1;p<.05).

Table 4.48: Cross tabulation of nursing staff attitude and breast feeding success.(N=207)

STAFF ATTITUDE	BREAST (n=100)		BOTTLE (n=107)		ROW TOTAL
	n	%	n	%	n
HELPFUL	82	52	76	48	158
UNHELPFUL	18	37	31	63	49

4.2.18 Frequency of breast feeds in the first six weeks home

There is no significant relationship between the frequency of breast feedings in the first 6 weeks of life and long term breast feeding success ($\chi^2=5.29; df=4; p>.05$).

Table 4.49: Cross tabulation of frequency of breast feeds in the first six weeks home and breast feeding success. (N=207)

HOW OFTEN	BREAST (n=100)		BOTTLE (n=107)		ROW TOTAL
	n	%	n	%	n
2 Hourly	9	41	13	59	22
2 1/2 Hourly	9	64	5	36	14
3 Hourly	29	57	22	43	51
3 1/2 Hourly	17	74	6	26	23
4+ Hourly	36	57	27	43	63
Did not feed	0	0	34	100	34

4.2.19 Help at home

There is no significant difference in breast feeding success between mothers' expressed need for help at home and success at breast feeding ($\chi^2=0.01; df=1; p>.05$).

Table 4.50: Cross tabulation of breast feeding success and expressed need for help at home. (N=207)

NEEDED MORE HELP	BREAST (n=100)		BOTTLE (n=107)		ROW TOTAL
	n	%	n	%	n
YES	36	49	39	51	75
NO	64	49	68	51	132

4.2.20 Husband's attitude

The data shows that husband's attitude towards breast feeding has a significant bearing on breast feeding success (chi sq=39.11;df=3;p<.0005).

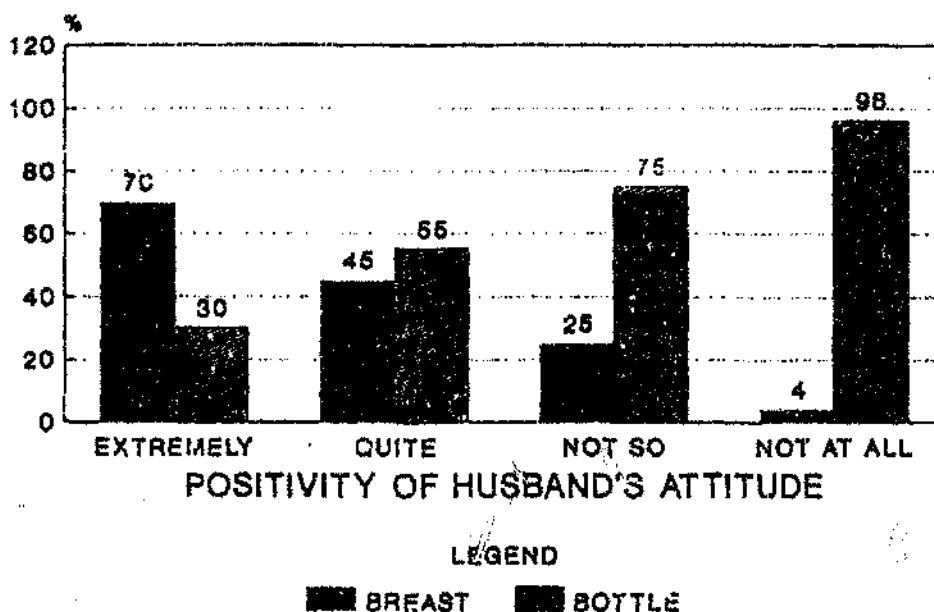


Figure 4.7: Percentage of successful breast feeding according to husband's attitude.

Seventy percent of mothers whose husbands were extremely positive to breast feeding are successful. This figure drops to 45% in the case of mothers whose husbands are quite positive and drops further when husbands are not so positive or not positive at all. (25% and 4% respectively.)

Chapter 5

DISCUSSION OF RESULTS

In this chapter descriptive and inferential findings presented in the previous chapter are integrated to provide both a profile of breast feeding practices and their determinants.

The results will be discussed under the following headings: Demographic and biographical variables; factors linked to the antenatal period; perinatal and postnatal factors affecting success.

5.1 Demographic and biographical variables

The demographic and biographical variables include factors such as geographical area studied, home language, marital status, age of the mother, social class, monthly income, and hospital at which their last baby was delivered. Also included are descriptions of family size and where relevant, success at previous breast feeding attempts.

The profile that emerged was that the majority of mothers (67%) were English speaking and these mothers were significantly more successful at breast feeding than mothers from the other language groups ($p < .001$). The mothers were mostly married and living with their spouses, having first babies (53%) and the largest group was between 21 and 26 years of age. Private hospitals (57%) were more popular than Provincial hospitals for delivery and those mothers who delivered in

were more popular than Provincial hospitals for delivery and those mothers who delivered in the Private hospitals had a greater chance of succeeding at breast feeding ($p < .001$).

As for social class according to the categorisation of Simkins and Hindson (1979:6), the respondents of the present study were evenly distributed between Class I and Class II with a very small percentage who fell into the lowest class, Class III.

Monthly income was also evaluated and in this study, almost half of the respondents said that their family income was in the highest category. Although the percentages of respondents in the lowest categories of social class and income are small, (17% and 20% respectively) it is in these categories that the highest proportion of unsuccessful breast feeders are found.

The importance of social class and income as determinants of breast feeding success is evident in this study and several other studies (Vide p.15). It can be said that the higher the income level and social class, the greater the chance of a successful breast feeding experience.

This phenomenon which appears to be a reality worldwide among the industrialised and Westernised nations is most disturbing. It is the lower income groups whose infant mortality and morbidity rates could be positively affected if more of these mothers could breast feed successfully.

Of the multiparous mother, the data indicated that more were unsuccessful (54%) in their previous attempts at breast feeding than were successful. Of the previously successful mothers, more (70%) tended to be successful rather than unsuccessful in further breast feeding attempts.

This study therefore shows a strong positive correlation between previous success at breast feeding and current breast feeding success. ($p < .001$) This relationship between previous success and current success is consistent with other studies. (Vide p.16).

5.2 Factors linked to the antenatal period.

The antenatal factors examined comprise retrospectively expressed attitudes of the mothers and the nature of the antenatal breast feeding information received.

5.2.1 Attitudes.

Attitudes of the mothers towards the concept of breast feeding were examined retrospectively in the study to determine whether there was a relationship between expressed feelings and action.

The results of the study showed clearly that Johannesburg mothers on the whole have a very positive outlook towards the concept of breast feeding a baby. The vast majority (85%) said that they had definitely planned to feed their current babies while still pregnant and 76% said they felt breast feeding to be extremely important.

In reality however, only 48% of the sample were still feeding at three months showing that verbalised positive attitudes alone are not sufficient to ensure a successful breast feeding experience.

A significant relationship was demonstrated between those mothers who said that breast feeding is extremely important and success ($p = < .0001$). More than half of these mothers went on to succeed.

The case for successful breast feeding is worse for those mothers who are ambivalent or negative towards the importance of breast feeding and their desire to breast feed. Of those who said breast feeding is fairly

important, only 25% went on to feed successfully. Those mothers who felt breast feeding was unimportant did not succeed at all.

Attitudes in pregnancy and expressed intention may thus be said to be two of the many determinants of successful breast feeding. Ladas (1972:341), also reinforced the need to support positive antenatal attitudes towards breast feeding.

The most frequently cited advantages to themselves as mothers was the convenience aspect as well as the positive effect on the mother/child relationship. As far as the advantages to the baby were concerned, the majority of mothers said that it was the perfect food for the baby and a further quarter of the sample cited the benefits to the mother/child relationship.

When asked about breast feeding disadvantages, over one third of the mothers said that they did not feel that there were any disadvantages to breast feeding at all. Another one third said that they found breast feeding restrictive. This is in keeping with the Furman(1979) study where the distribution of attitudes was similar.

It does appear therefore, that when probed, mothers do have some knowledge and insight into the value of breast feeding.

3.2.2 Antenatal information.

The study showed that most mothers are seen by doctors during their pregnancies with the majority of the mothers attending a private obstetrician. (62%)

Only half of the sample however, received any information concerning breast feeding. Of the information received in preparation for breast feeding, the medical profession made almost no contribution. (3%)

This is in keeping with other studies for example the Auerbach (1979) and Furman (1979) study. (vide p.17)

In this study a significant relationship was established between those women receiving antenatal information on breast feeding and ultimate breast feeding success ($p < .05$)

The most frequently quoted source of information antenatally was provided by the antenatal therapist in the form of a midwife or physiotherapist most of whom work in a private capacity. Those mothers who received information from the antenatal therapist fared best with breast feeding. 86% of these mothers went on to feed successfully.

Another source of information is the sister at the hospital antenatal clinic (27%). However, in this study because the bulk of mothers attended a private obstetrician during their pregnancies they did not have access to this source of information.

The media featured as prominently as the clinic sister as a source of information in this study (29%). It is difficult to specify what effects the media have on breast feeding trends at a given point in time but it is felt by the author that they cannot be overlooked.

5.3 Perinatal factors affecting breast feeding success.

Factors such as type of delivery, gestational age, issues involving the hospital stay, staff attitudes and feeding on discharge are discussed in this section of perinatal factors.

5.3.1 Type of delivery and gestational age.

The type of delivery that a woman had, a vaginal birth or Caesarian section did not affect her success at breast feeding.

This finding is consistent with Janke (vide p.20). The picture presented by other previous studies however is unclear on these issues (vide p.20).

As with type of delivery, no difference in breast feeding success was found between babies who were full term and those who were born prematurely. There were however very few in the latter category (8%) and therefore no generalisations can be made from this study.

5.3.2 Hospital stay.

In almost all of the studies quoted in the literature review (vide p.20) it was demonstrated that early initiation of breast feeding led to greater success than if contact was delayed.

The Ransome (1989) study conducted amongst the coloured population of Johannesburg demonstrated as does this study, that there is no difference in breast feeding patterns between those mothers who breast fed within the first hour after birth and those that did not.

Furthermore, in this study whether a mother roomed in with the baby, fed at night, or demand fed in the hospital did not influence her long term success at breast feeding. These findings were dissimilar to most other studies that assessed these issues (vide p.22.) and therefore lends itself to further investigation.

5.3.3 Hospital staff attitude.

Hospital staff attitudes towards the mothers was examined to ascertain whether staff could be considered a factor that influences breast feeding success. This was shown to be so in both the Ladas and Mobbs and Mobbs studies. (Vide p.24.)

In this study, when mothers perceived a positive and supportive attitude by the staff there were marginally more successful feeders than bottle feeders.

At the time interviewed, 3-6 months post delivery, the majority of mothers looked back at the hospital stay in terms of nurses support as a positive experience. 61% of the mothers said that they found the nursing staff to be "very helpful" and 71% said that there was nothing with the staff or the hospital that they found unhelpful or harmful with regard to breast feeding.

This may be due to delay in time of recall and the researcher feels that this is worthy of further in depth research before any reliable conclusions can be drawn.

5.3.4 Feeding on discharge.

The study showed that 84% of Johannesburg mothers were discharged from hospital mainly or only breast feeding.

This figure is higher than that which has been demonstrated in other studies in America and South Africa. (vide p.14) Comparisons must be viewed with caution as length of stay in hospital may have varied.

The numbers of Johannesburg mothers who are being discharged from the hospital still breast feeding, although not at ideal levels, is quite encouraging. The problem, as will be pointed out in further discussion is how to maintain lactation beyond initiation.

5.4 Postnatal factors affecting breast feeding success.

The relatively high percentage of mothers who are discharged breast feeding drops markedly once the mothers leave hospital in all studies both locally and in other Western and industrialised societies (vide p.14).

Possible factors associated with this attrition rate are the focus of discussion in this section and will be dealt with under the following headings: length of breast feeding experience; frequency of feeds; support systems;

husbands attitude; who helped with problems and source of influence to breast or bottle feed.

5.4.1 Length of breast feeding experience.

A rapid attrition rate in the present study, overseas studies (vide p.27) and South African studies (vide p.27) has been demonstrated.

Most of the studies documented in this research report examine the relationship of frequency of feeds to success only in terms of the first few days after delivery and do not focus on the first weeks home. (Vide p.21). The pattern of feeding and it's relationship to success may be different from hospital to home.

In this study, mothers were asked at what intervals their babies were fed in the first few weeks. Very few mothers said that they fed two and two and a half hourly, whereas more than a third of the mothers said that they fed four hourly in those first weeks.

There was no relationship between frequency of feeds and future breast feeding success according to the data of this particular study.

5.4.2 Support systems.

Support for the new mother when she gets home with the new baby is considered an important factor to enable her to breast feed successfully as has been demonstrated by numerous other studies. The successful effect on breast feeding in cultures where a doula was present was described (vide p.27)

In this study the majority of mothers (64%) responded that they did not feel retrospectively that they needed more support with regard to breast feeding in those early days.

It was also demonstrated that there was no difference in breast feeding success between those mothers who said that they felt the need for more support and those who did not. ($p > .05$) The concept of support was not specifically defined in this study making it difficult to make inferences in this area.

Of the sample, there were however over one third of the mothers who did say that they would have benefitted from more postpartum help. They could not however specify from whom they would have appreciated more support.

The only two support figures of whom any noticeable mention was made, were maternal mother (15%) and the clinic sister (16%).

5.4.3 Husband's attitude.

Husband's attitude appear to be an important determinant of breast feeding success.

The majority of mothers (75%) perceived their husbands to be supportive of their breast feeding endeavours and (46%) found them to be extremely so.

Only if the husband was felt to be extremely positive were the chances high of the mother feeding her baby successfully.

The more ambivalent or negative the husbands attitude was perceived to be, the smaller was the chance of a successful feeding experience. (vide p.62)

5.4.4 Who helped with problems.

Mothers who were successful breast feeders were asked who they turned to when they had problems with feeding. Almost half of these mothers (43%) said that they had used the sister at the local health clinic for problems.

It is interesting that very few mothers (15%) used a doctor for advice.

Few (5%) also used such lay organisations as La leche League and Breastfeeding Association at the time that the research was conducted.

5.4.5 Sources of influence to breast or bottle feed.

In trying to ascertain who or what influenced the "successful" mothers to be successful at breast feeding their babies, the answer appears to emanate from an intrinsic source within the mothers themselves. They breast fed because for various reasons, they wanted to.

The mothers who were bottle feeding at the time of the interview were looked at as a group. The majority of these mothers (68%) made their decisions to stop without outside pressure. Of these, (63%) said that when they started bottle feeding they did not continue with breast feeds at all.

Consistent with numerous other studies (vide p.32) this study also found that the most common reason cited by the mothers for giving up breast feeding, was an insufficient supply of milk.

From these findings it would appear that intrinsic motivation is worthy of note and this lends itself to further investigation as well as being of consequence for nursing practice.

Chapter 6

SUMMARY

6.1 Purpose of study

This exploratory and descriptive survey was carried out between January 1983 and November 1984 among White Johannesburg mothers with the view to establishing certain factors about the breast feeding practices at the time.

The overall purpose was to ascertain how many mothers managed to breast feed their babies for a 12 week period. This point of time was established arbitrarily as the cut off point of successful breast feeding.

Also examined were demographic, biographic, antenatal, perinatal and postnatal factors to determine whether any of these factors could be correlated to successful breast feeding.

6.2 Specific objectives:

The following were the specific objectives of the research;

- * To establish breast feeding practices among a group of White Johannesburg mothers.
- * To determine factors that positively influence breast feeding.

- * To ascertain whether antenatal information on breast feeding was made available to a group of mothers.
- * To establish who in the community provides the antenatal breast feeding information and support.
- * To identify whether there are any intrapartum factors that can be highlighted which help or hinder the breast feeding experience.
- * To determine who provides education and support for the mother in the first few weeks postpartum.
- * To ascertain the reasons mothers give for continuing or discontinuing to breast feed their babies.
- * To describe what mothers perceive to be the advantages and disadvantages of breast feeding.

6.3 Summary of literature review.

A look at the literature revealed that throughout the ages breast feeding trends have varied.

The availability of safe alternatives to breast feeding in the form of artificial formulas, has given the modern woman the choice of whether or not to breast feed.

International Paediatric organisations (vide p. 11) have officially stated that breast milk is optimum for the first 4 - 6 months of a baby's life and that health care workers should do everything possible to encourage and support this practice.

In the Westernised and industrialised parts of the world not every mother initiates breast feeding. Of those who do, many stop within the first weeks of birth so that by 3 - 4 months less than 50% of mothers in many cases are still breast feeding (vide p.14)

By way of comparison, in societies where breast feeding is the cultural norm, 100% of mothers start to breast feed and 98 -100% continue beyond 6 months (vide p.13).

Studies that addressed the possible causes of lactation failure in modern societies were looked at in terms of antenatal factors, perinatal factors and postnatal factors.

The salient points that emerged from the studies included the following:

- * The higher the social class the higher the likelihood of successful breast feeding.
- * In the case of a multiparous mother, if she was successful in breast feeding her first child/children her chances of success in the future were greater.
- * The chances of a mother successfully breast feeding her child are greater if she has a positive attitude to breast feeding and she has acquired antenatal information about breast feeding.
- * The type of labour and delivery the mother has may or may not affect her breast feeding success.
- * Many studies have demonstrated a positive correlation between successful breast feeding and factors such as early contact, demand feeding and rooming in in the hospital situation.
- * A positive and supportive attitude and atmosphere provided by the attendants to the mother in the early days postpartum has been shown by numerous studies to contribute to future breast feeding success.

- * Home support to the new mother has also been shown to be a vital issue. Studies have discussed those who give this support and the effects of various support groups or individuals on breast feeding success rates.
- * As far as reasons for terminating breast feeding are concerned, most mothers cite "insufficient milk " as a reason for failure of lactation.

6.4 Methodology

An interview schedule was drawn up in the form of a structured interview sheet.

The interview schedule dealt with the following issues:

- * demographic and biographical data
- * antenatal factors that may have influenced the future breast feeding experience
- * perinatal factors that may have affected the breast feeding success
- * postnatal factors that may be linked to breast feeding success or failure

The schedule was printed in English and translated into Afrikaans and precoded to facilitate computer analysis. It was then pretested, a pilot study was carried out, corrections were made and finally it was administered personally by the researcher.

The interviews were carried out at the Municipal Health Clinics of Johannesburg and only mothers who had babies between the ages of 3 - 6 months were eligible for interview. Convenience sampling was used.

207 interviews were carried out between January 1983 and November 1984. This number was divided into 5 proportional representative groups of the Johannesburg municipal area.

The data was processed by the Department of Biostatistics at the University of the Witwatersrand and a programme that is known only as programme 20 of the B.M.D.P. was utilised for the analysis.

6.5 Findings

6.5.1 Breast feeding success

One of the main objectives was to establish how "successful" the Johannesburg mothers were at breast feeding their infants. The findings showed that less than half of these mothers were still breast feeding at three months. The results of this study are similar to studies of other First World cities in that it is a minority of mothers who are still breast feeding at the recommended 4-6 months of age. (vide p.14)

6.5.2 Biographical and demographic factors

The profile of the Johannesburg mother who is more likely to succeed at breast feeding her baby is:

- a mother who is English speaking;

- belongs to the higher social class and income bracket;

- has had previous success at breast feeding a baby;

- delivered her baby in a Private rather than Provincial Hospital

6.5.3 Antenatal attitudes

Johannesburg mothers appear from the data to have positive attitudes towards the concept of breast feeding a baby. The majority of the mothers (85%) indicated that they had definitely planned during their pregnancy to feed the baby and 76% of the sample said that they felt it "extremely" important to breast feed a baby. The success rate in the study was however 48%.

A significant relationship was demonstrated between the women who said that they had definitely wanted to breast feed by the end of their pregnancy and those who went on to successfully breast feed ($p = <.0001$)

In the case of ambivalence or negativity towards breast feeding, the majority (67%) of mothers who expressed these attitudes did not breast feed successfully. There were, however, the 33% of mothers who, despite mixed feelings, were part of the successful breast feeding group.

These findings indicate that attitude and expressed intention are two of the many determinants of breast feeding but that positive attitude on its own is not sufficient to ensure a successful breast feeding experience.

6.5.4 Perceived advantages and disadvantages of breast feeding

The most commonly cited advantage to the mother of breast feeding her baby was the aspect of convenience.

The second most commonly cited advantage was the positive effects on the mother/child relationship.

The majority of mothers (61%) said that the main advantage to the baby was the ideal/perfect properties inherent in breast milk.

The mother/ child relationship issue was quoted by a further quarter (24%) of the sample as being the main advantage to the baby of being breast fed.

More than one third of the mothers, (37%) did not feel that there are any disadvantages attached to breast feeding a baby.

A similar proportion of the sample, (33%) felt that the biggest disadvantage of breast feeding was its restrictiveness.

6.5.5 Antenatal information

Antenatal information was shown by this study to be an important determinant of successful breast feeding. Those who received antenatal information were more likely to successfully breast feed than those who did not. ($p < .05$)

Only half of the mothers interviewed said that they had received information on breast feeding while pregnant.

6.5.6 Who supplies antenatal information

Despite the fact that the majority of mothers in the study were attended antenatally by doctors, only 3% of these mothers cited their doctors as an information source demonstrating that the doctors played almost no role in antenatal breast feeding preparation.

Of the sample who received antenatal breast feeding information, 39% cited the antenatal therapist as their source, making her the most frequently cited informant.

Another source of information was the sister at the hospital antenatal clinic. 24% of those interviewed obtained information from this source. This information is, however, limited to the small number (27%) of the population who were not attended by private doctors.

The media (T.V., magazines etc.) was also mentioned by 26% of this sample, in the same sort of frequency as the hospital sister.

6.5.7 Perinatal factors

The type of delivery whether vaginal birth or cesarian Section did not affect the future success of breast feeding. ($p \geq .05$)

Similarly, whether a baby was born prematurely or full term did not appear to be a determinant in this study of success or lack of success in breast feeding. ($p \geq .05$)

6.5.7.1 Hospital stay

* This study did not show a positive correlation between early initiation of feeding ($p \geq .05$), rooming in ($p \geq .05$), demand feeding ($p \geq .05$), night feeding ($p \geq .05$) and long term breast feeding success. These findings were not consistent with other studies that have examined these issues. (Vide p.20)

6.5.7.2 Staff attitudes

On the whole the Johannesburg mothers interviewed were quite satisfied with the hospital staff support with regard to breast feeding. The majority of the mothers (61%) found the nursing staff "very helpful" and 71% said that there was nothing in the hospital or with the staff that they found unhelpful or harmful with regard to breast feeding.

Those who perceived the staff to be positive with regard to breast feeding, were marginally more successful at breast feeding than those who did not ($p \leq .05$). Of those mothers who found the nursing staff "helpful", 52% went on to ultimately succeed at breast feeding whereas, only 37% of those who found the staff "unhelpful" became part of the successful breast feeding group.

6.5.7.3 Feeding on discharge

The study showed that the majority of mothers (84%) were discharged from hospital mainly breast feeding. This figure is slightly higher than figures obtained from other studies both local and overseas. (Vide p.14)

6.5.8 Postnatal home support

6.5.8.1 Frequency of feeds

No relationship was demonstrated in this study between the frequency of feeds in the first few weeks home and future breast feeding success.

6.5.8.2 Support systems

Most of the mothers interviewed in this study (64%) were quite satisfied with the support that they had received in the early days home.

No difference in breast feeding success was demonstrated between those mothers who said that they felt the need for more support and those who said that they did not. ($p > .05$)

One third of the mothers said that they would have appreciated more support but could not specify from whom they would have appreciated this support.

Few of the mothers mentioned that they would have appreciated more help and support from the clinic sister (15%) and their maternal mothers (16%).

6.5.8.3 Husband's attitude

Husband's attitude appears to be an important determinant of successful breast feeding.

If the mother perceived the husband's attitude to be extremely positive then the chances were good that she would breast feed successfully. The study demonstrated that 70% of mothers who perceived their husband to be "extremely positive" of their breast feeding endeavours were successful.

The more ambivalent or negative the husband's attitude was perceived to be, the smaller the chance there seemed to be of a successful breast feeding experience. Where the husband was "quite positive", 45% breast fed, whereas only 26% of the mothers whose husbands were "not so positive" managed to breast feed successfully. Only 5% of the mothers whose husbands were "not positive at all" succeeded.

6.5.8.4 Who helped " successful " mothers with problems

The most commonly cited source of help for the successful feeders were the Municipal Health sisters at the local clinics. (Vide p.64)

Other groups or people consulted were the doctors in 15% of cases, the maternal mother in 12% of cases and few (5%) consulted such organisations as La Leche League and Breast Feeding Association when they had problems.

6.5.9 Reasons for continuing or discontinuing to breast feed

The " successful " mothers on the whole appeared to have succeeded because, for some unspecified reasons, they intrinsically wanted to. More than half of these mothers (59%) cited themselves as the main source of influence towards successful breast feeding.

The bottle feeding mothers also did not appear on the whole to be influenced by any specific person or situation other than their own desire to stop breast feeding when they did.

In most cases, (63%) weaning from breast to bottle occurred immediately. Very few did this gradually. (Vide p.64)

The most common reason cited in this study for giving up breast feeding was an insufficient supply of milk. This finding is consistent with other studies that have dealt with this issue. (Vide p.65)

6.6 Conclusions

The following conclusions could be drawn from this descriptive survey:

- * The Johannesburg mothers did not fare any better or any worse than mothers in other breast feeding studies conducted in First World countries. By three months only 48% of the sample were still breast feeding. The percentage of mothers discharged from hospital still breast feeding was however, slightly higher in this study than in others.

- * Johannesburg mothers on the whole expressed positive attitudes towards the concept of breast feeding. These attitudes were not however consistent with actual success based on the results obtained from the survey. It can therefore be concluded that verbalised positive attitudes alone are not sufficient to ensure a successful breast feeding experience.

- * The mother who is more likely to succeed at breast feeding is :

a mother who is English speaking, comes from the higher social class and income bracket, has breast fed a previous baby successfully, feels that it is extremely important to breast feed a baby and definitely wanted to breast feed by the end of the pregnancy; has received some antenatal information on breast feeding preferably from an antenatal therapist; delivered at a Private

Johannesburg hospital and perceived her husband's attitude towards breast feeding as extremely positive.

This study did not find a positive association between breast feeding success and factors such as type of delivery, gestational age, early initiation of breast feeding, rooming in, night feeds, demand feeding, frequency of feeds at home and post partum support whether in hospital or at home.

* Antenatal information was shown to play a significant role in future breast feeding success. Only half of the sample reported having received any antenatal information and of those a mere 3% reported having received any information from their doctors. This indicated that doctors do not appear to play much of a role in breast feeding promotion.

* The successful breast feeders claimed that their main source of influence to breast feed was themselves and likewise the bottle feeders reported that they were not influenced by anyone other than themselves to give up breast feeding.

* The most common reason cited by the bottle feeding group for giving up breast feeding was "insufficient milk".

* The main source of post natal help with feeding problems for the successful breast feeders appears to have been the sister at the local Health Clinic. Very few of these mothers used doctors for breast feeding advice and few used lay support organisations such as La Leche League and the Breast Feeding Association.

6.7 Limitations

* This study was a descriptive survey and the responses were not probed. No in depth attitudinal and motivational issues were dealt with.

* The study was limited to the White population of Johannesburg and no comparisons with other population groups in other areas of the country were made.

* For logistic reasons, working mothers were excluded from the sample.

* A broad spectrum of issues that could affect breast feeding success was dealt with in this survey in a limited manner including antenatal, perinatal and post natal factors. Each of these areas is significant enough to warrant in depth investigation.

* The interviews were conducted personally by the author who wore a nurses uniform. Some of the responses may have been tempered by the "halo effect" and therefore did not reflect true feelings.

* The concept of support was important in this survey but this was not defined and, therefore, was not specifically measured.

* Use of the convenience sampling may have biased the results.

* The fact that the mothers were expected to remember details retrospectively may have distorted the true picture.

6.8 Recommendations for midwifery practice

As a result of this study the following recommendations could be made for midwifery practice:

* Because breast feeding is potentially more successful among the higher social classes and income groups, midwives should, wherever possible, focus antenatal preparation and postnatal support on the lower social and income groups.

* Previous success bodes well for future success. Therefore, midwives should make a concerted effort to help a primiparous mother prepare for breast feeding and be available to deal with the practice of breast feeding and any problems that may arise in the postpartum phase to try to overcome them.

* Because antenatal information has been shown to positively affect future breast feeding success, midwives working with pregnant women should ensure that their knowledge is continually updated and they should be committed to teaching mothers, whether formally or informally, wherever and whenever possible.

* Extremely positive attitudes towards breast feeding were shown to be positively associated with breast feeding success. To affect attitudes is not an easy task. It is therefore recommended that midwives are employed as health educators in schools and even youth organisations, for example Scouts and Girl Guides, in an attempt to be part of the socialisation process of the parents of the future.

* The attitude of the father was shown to be important. Midwives who work as antenatal therapists should definitely insist on the father attending a course on breast feeding preparation together with his wife during her pregnancy. This is not only an opportunity to impart the knowledge with which he can support his wife, but also provides an opportunity for an attitude change.

* The midwives at the Municipal Health Clinics were the most frequently quoted sources of support for breast feeding problems when the mother got home with her baby. This places a responsibility on these sisters to ensure that their knowledge of common breast feeding problems and their solutions should continually be updated. Standardisation of such knowledge throughout the clinics would also benefit the consumer.

6.9 Recommendations for further research

As a result of this study the following recommendations could be made for further research:

* As this study was carried out a number of years ago reassessment of the current status quo with regard to breast feeding profiles is recommended.

* It has been demonstrated both in this study and others that the higher the social class and income the greater the chance of breast feeding success. An area for further research would be to analyse what it is about the upper social classes that results in this phenomenon as well as the motivators operating within the lower economic groups.

* It is necessary to do in depth personality and attitude studies of the "successful" breast feeding mothers to ascertain what it is about these women that makes them part of the successful group.

* Gestational age and type of delivery were not shown to be significant to breast feeding success in this study but the numbers within the sample were small. Further study in these areas is recommended.

* A detailed study of factors such as early initiation of breast feeding, rooming in, demand feeding and long term breast feeding success is recommended before one can conclude as did this study that they are not significant.

* This study indicated that on the whole the Johannesburg mothers were satisfied with the support and advice they received in the hospital with regard to breast feeding. As there may have been a problem of recall, further research is recommended.

* A more detailed and longitudinal investigation of issues such as frequency of feeds in the hospital, length of hospital stay, frequency of feeds in the first weeks home and use of complement and supplement feeds would paint a more accurate picture of when the problems related to the rapid attrition rate actually occur.

* This survey did not deal with the issue of postpartum support of the new mother in any depth at all. Further research into this concept is recommended.

* The medical profession was shown to play a minimal role both in breast feeding preparation and postpartum support. An area for further research would be to analyse why this is the case and the feasibility of more involvement of doctors in breast feeding promotion could be explored.

* Lay support groups like La Leche League and The Breast Feeding Association did not feature significantly in this study. These organisations have received promotion from the media in recent times. Further research would reveal whether they have made any impact on the community since then.

CONCLUDING COMMENT

This is an initial study which has highlighted the complicated factors involved in breast feeding. It would appear that antenatal and postnatal information and support has a positive influence on successful breast feeding. Further in depth investigation into the complexity and interrelationship of these factors is needed as it is important for as many mothers as possible to be enabled to give their children that optimum start in life through breast feeding.

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Appendix A

INTERVIEW SCHEDULE

Fill in the appropriate number in the space provided. All responses have been precoded for ease of computation.

CODE NO

1. AREA OF CLINIC
1. NORTH
 2. SOUTH
 3. EAST
 4. WEST
 5. CENTRAL

--

2. AGE OF BABY

1. 12-14 WEEKS
2. 14-16 WEEKS
3. 16-18 WEEKS
4. 18-20 WEEKS
5. 20-22 WEEKS
6. 22-24 WEEKS

--

3. WHAT IS YOUR HOME LANGUAGE?

1. ENGLISH
2. AFRIKAANS
3. OTHER.

--

4. INTO WHICH OF THE FOLLOWING GROUPS DOES YOUR AGE FALL?

1. 16-20 YEARS
2. 21-25 YEARS

3. 26-30 YEARS
4. 31-36 YEARS
5. 37+ YEARS

☐

5. WHERE WAS YOUR BABY BORN?

1. JOHANNESBURG HOSPITAL
2. J.G.STRYDOM
3. SOUTH RAND
4. MARYMOUNT
5. FLORENCE
6. PARK LANE
7. SANDTON CLINIC
8. HOME
9. OTHER

☐

6. WHAT TYPE OF DELIVERY DID YOU HAVE?

1. NORMAL VAGINAL DELIVERY
2. CAESARIAN SECTION
3. FORCEPS/VACUUM
4. OTHER

☐

7. WAS YOUR BABY

1. FULL TERM
2. PREMATURE
3. SMALL FOR DATES

AT BIRTH?

☐

8. HOW SOON AFTER THE DELIVERY DID YOU BREAST FEED THE BABY FOR THE FIRST TIME?

1. WITHIN THE FIRST HOUR
2. +1-3 HOURS
3. +3-8 HOURS
4. +8-11 HOURS
5. +11 HOURS
6. DID NOT FEED AT ALL

☐

9. WHAT IS YOUR MARITAL STATUS?

1. MARRIED
2. SINGLE
3. DIVORCED
4. WIDOW
5. SEPARATED

☐

10. WHO ARE YOU LIVING WITH AT PRESENT?

1. HUSBAND/BABY'S FATHER ALONE
2. HUSBAND AND PARENTS
3. HUSBAND AND PARENTS-IN LAW
4. ALONE

☐

11. HOW MANY CHILDREN DO YOU HAVE?

1. 1
2. 2
3. 3
4. 4
5. 4+

☐

12. DID YOU BREAST FEED ANY OF YOUR OTHER CHILDREN FOR MORE THAN 12 WEEKS?

1. YES
2. NO

☐

13. WHAT IS THE OCCUPATION OF THE BREAD WINNER OF THE FAMILY?

1. CLASS 1 - Owners, managers and and professionals
2. CLASS 2 - Semi - Professionals, Clerical, White collar, Non Manual Worker and supervisors.

3. CLASS 3 - Skilled, Semi-skilled and
Unskilled workers.

☐

14. INTO WHICH OF THE CATEGORIES DOES YOUR TOTAL MONTHLY
INCOME FALL?

1. R1800+
2. R1,100 - 1,799
3. R400 - R1,099
4. LESS THAN R400

☐

15. IN GENERAL, HOW IMPORTANT WOULD YOU SAY BREAST
FEEDING IS FOR A BABY?

1. EXTREMELY IMPORTANT
2. FAIRLY IMPORTANT
3. NOT VERY IMPORTANT
4. NOT IMPORTANT AT ALL

☐

16. HOW ARE YOU FEEDING YOUR BABY AT PRESENT?

1. ONLY BREAST FEEDING
2. MAINLY BREAST FEEDING
3. MAINLY BOTTLE FEEDING
4. ONLY BOTTLE FEEDING

☐

17. WHEN DID YOU STOP MAINLY BREAST FEEDING?

1. <12 WEEKS
2. >12 WEEKS

☐

18. WHO LOOKED AFTER YOU WHILE YOU WERE PREGNANT?

1. G.P.
2. OBSTETRICIAN
3. MIDWIFE AT HOSPITAL CLINIC
4. DOCTOR AT HOSPITAL CLINIC
5. PRIVATE MIDWIFE
6. OTHER

☐
19. DID YOU GET ANY ADVICE OR INFORMATION ABOUT BREAST
FEEDING WHILE YOU WERE PREGNANT?

1. YES
2. NO

☐
20. IF YES BY WHOM?

1. G.P.
2. OBSTETRICIAN
3. SISTER AT HOSPITAL CLINIC
4. DOCTOR AT HOSPITAL CLINIC
5. ANTENATAL TEACHER
6. MEDIA
7. OTHER

☐
21. BY THE END OF YOUR PREGNANCY DID YOU FEED THAT YOU
WANTED TO BREAST FEED YOUR BABY?

1. DEFINITELY WANTED TO BREAST FEED
2. HAD MIXED FEEDING ABOUT BREAST
FEEDING
3. DID NOT WANT TO BREAST FEED

☐
22. WAS ROOMING IN PRACTISED AT THE HOSPITAL THAT YOU
DELIVERED AT i.e. did you have the baby with you for most
of the day and night?

1. YES
2. NO

☐
23. ON THE WHOLE DI YOU BREAST FEED AT NIGHT IN THE
HOSPITAL i.e after 11P.M. and before 5A.M.?

☐
24. DID YOU FEED YOUR BABY ON DEMAND OR AT FIXED FEEDING
INTERVALS?

1. ON DEMAND
2. FIXED FEEDING SCHEDULES

☐

24. HOW WERE YOU FEEDING THE BABY WHEN DISCHARGED FROM THE HOSPITAL?

1. BREAST FED ONLY
2. BREAST FED AND OCCASIONALLY BOTTLE FED
3. BOTTLE FED
4. BOTTLE FED AND OCCASIONALLY BREAST FED

☐

25. DID YOU FIND THE NURSING STAFF IN THE HOSPITAL HELPFUL AND SUPPORTIVE WITH REGARD TO BREAST FEEDING?

1. VERY HELPFUL
2. QUITE HELPFUL
3. NOT SO HELPFUL
4. NOT HELPFUL AT ALL

☐

26. WAS THERE ANYTHING IN THE HOSPITAL OR WITH THE STAFF THAT YOU FOUND UNHELPFUL OR HARMFUL WITH REGARD TO BREAST FEEDING?

1. YES
2. NO

☐

27. IF YES, IN WHAT WAY DID YOU FIND IT SO?

1. NO SUPPORT OR ENCOURAGEMENT
2. HOSPITAL ROUTINE
3. ROUGH HANDLING AND NEGATIVE ADVICE
4. LACK OF SUPERVISION AND ASSISTANCE
5. OTHER

☐

28. IN THOSE FIRST 6 WEEKS HOME, HOW OFTEN ON AVERAGE WOULD YOU SAY YOU BREAST FED YOUR BABY DURING THE DAY?

1. 2 -2 1/2 HOURLY
2. 3 -3 1/2 HOURLY
3. 4 HOURLY
4. MORE THAN 4 HOURLY
5. OTHER

☐

29. DID YOU FEEL YOU NEEDED MORE SUPPORT WITH REGARD TO BREAST FEEDING IN THOSE FIRST WEEKS HOME?

1. YES
2. NO

☐

30. IF YES, FROM WHOM DO YOU THINK YOU WOULD HAVE APPRECIATED MORE SUPPORT?

1. G.P.
2. OBSTETRICIAN
3. CLINIC SISTER
4. PAEDIATRICIAN
5. HUSBAND
6. MOTHER
7. MOTHER -IN - LAW
8. FRIENDS
9. OTHER

☐

31. WHAT IS/WAS YOUR HUSBAND/BABY'S FATHER'S ATTITUDE TOWARDS BREAST FEEDING? IS/WAS HE ?

1. EXTREMELY POSITIVE AND SUPPORTIVE
2. QUITE POSITIVE AND SUPPORTIVE
3. NOT VERY POSITIVE AND SUPPORTIVE AT ALL
4. NOT APPLICABLE

☐

32. WHAT WOULD YOU SAY ARE THE SPECIFIC ADVANTAGES OF BREAST FEEDING TO MOTHER AND BABY?

ADVANTAGES TO MOTHER -

1. CONVENIENT, EASY

2. RESTORES HER FIGURE
3. GOOD FOR MOTHER CHILD RELATIONSHIP
4. PREVENTS CANCER
5. OTHER

☐

33. ADVANTAGES TO BABY -

1. CONVENIENT, READILY AVAILABLE
2. GOOD FOR MOTHER/CHILD RELATIONSHIP
3. LESS ALIERGIES
4. IDEAL FOOD - TEMPERATURE,

CONSTITUTION

5. ENCOURAGES GOOD JAW DEVELOPMENT

☐

34. DISADVANTAGES AND PROBLEMS

1. CAN'T TELL HOW MUCH BABY IS GETTING
2. RESTRICTIVE
3. TIRING
4. NONE
5. OTHER

☐

FOR THOSE WHO MAINLY OR ONLY BREAST FEED

35. WHO DO YOU THINK INFLUENCED YOU MOST TO BREAST FEED YOUR BABY?

1. G.P.
2. OBSTETRICIAN
3. PAEDIATRICIAN
4. SISTER AT MUNICIPAL CLINIC
5. NURSING STAFF IN HOSPITAL
6. SELF
7. HUSBAND
8. MOTHER
9. MOTHER - IN - LAW
10. FRIENDS
11. LA LECHE LEAGUE
12. MEDIA

13. OTHERS

☐

36. IF/WHEN YOU HAVE A FEEDING PROBLEM WHO WOULD YOU TURN TO FIRST?

1. G.P.
2. OBSTETRICIAN
3. PAEDIATRICIAN
4. SISTER AT MUNICIPAL CLINIC
5. HUSBAND
6. MOTHER
7. MOTHER - IN - LAW
8. FRIENDS
9. LA LECHE LEAGUE/ B.F.A.
10. OTHER

☐

FOR THOSE WHO MAINLY OR ONLY BOTTLE FEED

37. HOW OLD WAS YOUR BABY WHEN YOU STARTED BOTTLES?

1. FIRST WEEK
2. +1 - 4 WEEKS
3. +4 - 8 WEEKS
4. +8 - 12 WEEKS
5. +12 - 16 WEEKS
6. +16 - 20 WEEKS
7. 20 + WEEKS

☐

38. FOR HOW LONG AFTER YOU GAVE YOUR BABY A BOTTLE DID YOU CONTINUE TO GIVE BREAST FEEDS OR DO YOU INTEND TO GIVE BREAST FEEDS?

1. IMMEDIATELY
2. APPROX. 1 WEEK
3. APPROX. 2 WEEKS
4. MORE THAN 3 WEEKS

☐

39. WHAT WOULD YOU SAY WAS/WERE THE MAIN REASONS FOR WHY YOU STOPPED BREAST FEEDING?

1. DIDN'T HAVE ENOUGH MILK
2. BABY NOT GAINING OR LOSING WEIGHT
3. HAD TO GO BACK TO WORK
4. TOO MANY OTHER PRESSURES e.g.
family
5. PHYSICAL COMPLICATIONS TO THE
MOTHER
6. EXHAUSTION
7. NO ENJOYMENT OR SATISFACTION
8. BABY TOO DEMANDING
9. OTHER

40. WHO WOULD YOU SAY INFLUENCED YOUR DECISION TO BOTTLE FEED YOUR BABY?

1. G.P.
2. OBSTETRICIAN
3. PAEDIATRICIAN
4. SISTER AT MUNICIPAL CLINIC
5. SELF
6. HUSBAND
7. MOTHER
8. MOTHER - IN - LAW
9. FRIENDS
10. OTHER



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