WEANING PRACTICES AND SOME PROBLEMS ENCOUNTERED BY BREAST-FEEDING MOTHERS

by

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NOVEMBER 1996
"I declare that:

Weaning practices and some problems encountered by breast-feeding mothers

is my own work. All the sources that I have used or quoted have been indicated and acknowledged by means of complete reference."

EMILY ALETTA WATERSON
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ABSTRACT

The purpose of the study was to determine if mothers who breast-feed their babies for nine months and longer experience problems when weaning. This research also determines the type of problems and weaning practices used by those mothers. In this descriptive study, data was collected from 150 mothers by means of questionnaires and interviews. The subjects were mothers who breast-fed their children for nine months or longer, who attended antenatal and postnatal clinics at Coronation Hospital. Reasons for weaning were *inter alia* the belief that the baby was old enough to be weaned.

The results revealed that 42 (31.34%) of the respondents experienced problems during weaning. The problems included, among others, guilt feelings in the mother. Mothers use harsh methods of weaning such as sending a child away to a relative. There is minimal involvement of health workers in the health education of mothers on weaning.

**Key terms:**

- Breast-feeding
- Weaning
- Weaning practices
- Health education on weaning
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<td>2.</td>
<td>NCEPA : National Childbirth and Parenting Association</td>
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CHAPTER 1

ORIENTATION TO THE FIELD OF STUDY

1.1 INTRODUCTION

In this study, problems experienced by mothers while weaning their babies after prolonged periods of breast-feeding will be investigated to establish the specific problems which they have had and to make recommendations as to how to address these problems experienced during weaning.

The motivation for this study arose from the concerns that health workers express about weaning related problems which they often come across in their daily work situation in hospital based or community based clinics, such as postnatal and antenatal clinics. Conversations with mothers attending these health care services made the researcher aware of the fact that mothers have real problems during the weaning process, which they are not able to cope with or do not know how to cope with.

It appeared that most of the mothers fall into the lower socio-economic groups and they breast-fed their babies for periods longer than nine (9) months. According to Bergh (1993: 14–15) and Vlok (1993: 540) breast-feeding for long periods can be regarded as one of the primary preventive measures of malnutrition in the lower socio-economic groups.
1.2 BACKGROUND TO THE RESEARCH PROBLEM

The United Nations Children Fund (UNICEF), the World Health Organisation (WHO) and the United Nations' Educational, Scientific and Cultural Organisations (UNESCO) recommend that breast-feeding should be continued well into the second year of life and longer if possible, because breast-milk is a good source of energy and protein and it protects the baby against diseases such as diarrhoea and respiratory infections. Babies frequently get ill as they learn to crawl, walk and play, and a baby who is ill will benefit from breast-milk. In this case, breast-milk provides a nutritious easily digestible food when a baby loses his/her appetite for other foods (UNICEF, WHO & UNESCO 1989: 21).

Furthermore, it has been proven that babies benefit physiologically and psychologically from breast-feeding (McCall Sellers 1993: 234). Physiologically, the baby benefits from breast-feeding in the sense that breast milk contains nutrients in the correct proportions for the baby, and breast milk protects the baby against respiratory and gastro-intestinal infections. Breast milk contains antibodies against these infections and it is also sterile and thus decreasing the incidence of diarrhoea in babies (UNICEF, WHO & UNESCO 1989: 15–21).

Psychologically, the baby and the mother benefit from breast-feeding since it promotes bonding between them (Lindenberg, Artola & Estrada 1990: 35–41). The Department of National Health and Population Development (NHPD, 1992: 18) also indicates that breast-feeding provides love, security and comfort for the baby. A mother may therefore comfort her frightened or sick baby with the breast. Breast-feeding is an enjoyable experience for both the mother and the baby (Bottorff 1990: 205; Hancock 1992: 236). A detailed outline of views on the benefits of breast-feeding will be included in chapter 2.
Various problems may be encountered by a mother and her baby when she weans him/her off the breast, because breast-feeding has the physiological and psychological benefits for both the mother and her baby. Janke (1992: 48–53) states that the problems may either be physiological or psychological for both the mother and her baby. Examples of physiological problems are breast engorgement in the mother when weaning is done abruptly, and malnutrition in the baby especially in the lower socio-economic groups if the baby's diet is deficient in nutrients (WHO & UNICEF 1988: 4). As far as psychological problems are concerned, various authors agree that it is difficult to give up the closeness of breast-feeding sessions (Bottorff 1990: 208; NHPD 1992: 18–19; Ladewig, London & Olds 1990: 654). A baby who is accustomed to the breast for its comfort and security may be upset by the withdrawal of breast-feeds. Therefore, a mother becomes anxious if the baby is unhappy about being weaned. Bishop (1985: 211–213), and NHPD (1992: 18–19) state that some mothers feel guilty and psychologically stressed during the weaning period, when the baby is upset. Health workers employed in various clinics, such as antenatal, postnatal or well baby clinics, should play an important role in reassuring the mother during this stressful time. They also have a role to play in teaching mothers regarding the weaning process. This could be done during pregnancy or once the baby is born and during weaning.

Mothers who are experiencing problems during weaning should have a formal or informal counselling service available to them. Informal counselling is often provided by members of the family and friends. In traditional societies doulas played an important role in assisting the mother during the breast-feeding and weaning periods (Bottorff 1990: 204; Brownlee 1990: 29; Dettwyler 1987: 633–635). With development of modern societies and the changing family structure from extended families to nuclear families, the traditional support
previously provided by *doulas* is dwindling. Ntombela (1994: 20–21) acknowledges the disappearance of traditional support systems in Africa and recommends the formation of formal support systems by health workers.

Problems experienced by mothers during weaning may be due to ignorance about weaning. It appears that mothers who lack knowledge about weaning, when taking their babies off the breast, receive incorrect information from misinformed people such as family members, friends or even some health workers who may have inadequate knowledge about weaning. The ignorance about weaning may lead to use of incorrect weaning methods by mothers. According to Jubber (1991: 30) extreme methods of weaning may be used, and they may cause trauma to the child and often the parents as well. These extreme methods of weaning include scoldings, abuse, threats, ridicule and separation of the baby from the mother for several days (Jubber 1991: 31–33). The use of extreme methods of weaning used by some mothers indicates that there is a need for health education of these mothers about weaning. The health education should be done by health workers who work in clinics such as antenatal, postnatal and well baby clinics.

Prevention of problems experienced by mothers during weaning, should be commenced by health workers at antenatal clinics. Health workers at antenatal clinics should teach mothers about breast-feeding and weaning, and continue to guide the breast-feeding mothers at postnatal and well baby clinics until mothers have weaned their babies off the breast. Counselling of mothers who encounter problems should be implemented by health workers at well baby clinics.
1.3 STATEMENT OF THE PROBLEM

While working at Coronation hospital in the antenatal and postnatal clinics, the researcher and colleagues observed and dealt with mothers who had problems when weaning their babies after breast-feeding for longer than nine (9) months.

It appears that during the weaning period the baby is upset by the withdrawal of breast-feeds and in turn the mother experiences problems, such as difficulty in comforting or pacifying the crying baby, guilt feelings and sadness. Sometimes the more serious problems such as diarrhoea and malnutrition may be encountered in the baby.

It appears that problems experienced by mothers during weaning may be related to lack of knowledge about weaning. It is therefore necessary to investigate if mothers receive health education on weaning from health workers when visiting antenatal, postnatal, or well baby clinics, as well as determine if the nurses guide or counsel mothers during this difficult period of weaning. A mother who experiences problems when weaning a child may choose not to breast-feed her next one. She might seek advice from various people such as friends and relatives, on weaning methods and some of the information received on weaning may be incorrect and thus aggravating her problem.

The problem of this study is formulated in the following research questions:

- Do all mothers who breast-feed their babies for nine months or longer experience problems during weaning?

- What type of problems do mothers experience during the weaning period?
What type of weaning practices do mothers use?

Do mothers need support, counselling and guidance from health workers when they wean their babies off the breast?

Do health workers provide any health education on weaning for the mothers during the antenatal and postnatal period or throughout the breast-feeding or weaning period?

1.4 PURPOSE OF THE STUDY

The aim of the study is to determine if mothers who breast-feed their babies for nine (9) months and longer, experience problems when weaning. Furthermore, the researcher wishes to determine the type of problems experienced by mothers during weaning and the weaning practices used by the mother. The researcher also wishes to determine if health workers give mothers health education on weaning during the antenatal or breast-feeding period, or counsel mothers as they encounter problems and make recommendations on how to handle or overcome such problems or assist the mother.

The objectives of the study are to determine:

- if mothers experience problems when weaning their babies after prolonged periods of breast-feeding, namely nine (9) months and longer;

- the type of problems experienced by mothers during weaning;
weaning methods and practices used by mothers;

- if there is a need for guidance, support and counselling of mothers during the period when the baby is weaned off the breast;

- if health workers provide health education on weaning for the mothers, during the antenatal and breast-feeding period.

1.5 THE SIGNIFICANCE OF THE STUDY

A study such as this, will reveal if mothers experience problems during weaning, the type of problems, weaning practices and whether health workers give mothers health education on weaning or counsel and guide them during the process of weaning.

Knowledge of correct weaning practices by the mother is important so that her anxiety can be reduced during the weaning period. A mother who experiences problems during weaning may not breast-feed her next child. Lack of knowledge about weaning may lead to use of incorrect weaning practices by the mother, which may be traumatic for the child and often for the parents as well (Jubber 1991: 31–33).

Jubber (1991: 31–33) describes the "harsh" methods of weaning. Such methods include sudden denial of the breast and physical or emotional abuse of the weanling by scolding or teasing him/her. He favours the gentler and more gradual methods of weaning which mothers should be educated about. The gentler methods of weaning include giving the child more love and attention at

The information from this research may be of value to nursing educators, as it may be used to plan education of student nurses involved in basic or post-basic study courses. Health workers who work in hospital and community based, antenatal, post-natal and well baby clinics, would become more aware of the type of problems experienced by mothers during weaning and thus assist, guide or counsel breast-feeding mothers, on safe weaning practices.

1.6 METHODOLOGY

The study is descriptive since it explores aspects of weaning. In this study the population consisted of mothers who breast-fed their babies for nine (9) months or longer. The non-probability accidental sampling was used, in which 150 mothers participated in the study. Data was collected by means of questionnaires and interviews, during October and November 1993.

1.7 DEFINITION OF TERMS

The researcher found it necessary to define certain concepts for the purpose of clarification of this study.

1.7.1 Breast feeding

The Oxford Dictionary (Hornby, Cowie & Gimson 1983: 103) defines breast-feeding as feeding a baby from the breast or to suckle.
In this study breast-feeding means to feed a baby from the mother's breast.

1.7.2 Counselling

Counselling is helping someone look at a problem in such a way that he can explore it and thereby discover ways and means of living more resourcefully and with greater satisfaction (Hancock 1992: 395).

In this study counselling refers to helping the mother or her family cope with the problems associated with weaning.

1.7.3 Community health nurse

Vlok (1993: 15) defines a "community nurse as any nurse who dispenses health care outside the hospital and comes into direct contact with the patient-in-his-environment, be it in the family, in a clinic, or in the patient's place of work". In this study a community health nurse refers to a professional nurse, qualified in community health nursing, with whom mothers come in contact at antenatal, postnatal and well baby clinics which are community based.

1.7.4 Education

Education is a word derived from the Latin "e" meaning from, and "ducere" meaning to lead. Education may be seen as leading an individual, in this instance the mother, from a state of "not-knowing" to one of "knowing" (Mellish & Brink 1986: 85; Mellish & Wannenburg 1992: 45).
In this study education refers to ensuring that the mother has knowledge about the issues relevant to the study, namely, breast-feeding and weaning.

1.7.5 Guidance

Guidance refers to the direction of somebody (Makinde 1988: 41-42).

In this study guidance of a mother refers to leading, teaching or showing the mother how to breast-feed and wean her baby correctly.

1.7.6 Health education

Health education is a planned multifaceted educational process oriented towards positive lifestyle change (Logan & Dawkins 1986: 301).

The aim of health education is promotion of good health (Vlok 1993: 281).

Health education is that form of education which is provided for people to enable them to attain and maintain health (Mellish & Wannenburg 1992: 82).

In this study health education refers to the active learning process in which the mother gains knowledge on breast-feeding and weaning.

1.7.7 Health worker

In this study a health worker includes all categories of nurses which mothers come in contact with, at antenatal, postnatal clinics and well baby clinics which may be community or hospital based.
The categories of nurses with whom mothers come in contact at the clinics are *inter alia* student nurses doing the basic or post–basic courses and professional nurses including midwives, community health nurses and district nurses.

1.7.8 **Prolonged breast–feeding**

Prolonged breast–feeding: Rao and Kanade (1992:187) refer to prolonged breast–feeding as exclusive breast–feeding beyond six months or partial breast–feeding up to two to three years.

In this study prolonged breast–feeding refers to breast–feeding a baby for nine (9) months and over.

1.7.9 **Weaning**

Weaning is the processes whereby the child is encouraged to give up the breast or bottle feeding and to accept other foods instead (Castiglia 1992: 38).

Mosby dictionary (Glanze, Anderson, Anderson, Urdang & Swallow 1986: 1198) defines weaning as "to induce a child to give up breast–feeding and to accept other food in place of breast milk".

Kibel & Wagstaff (1995: 91) who are South African authors, define weaning as "cessation of breast–feeding or introduction of a transitional diet".

In this study weaning refers to taking the child off the breast, and it does not include weaning the child off a feeding bottle.
1.8 THE ORGANIZATION OF THE STUDY

The study is made up of five chapters and set out as follows:

- **Chapter One: Introduction**
  In this chapter the researcher attempted to discuss issues related to problems experienced by mothers during weaning, after prolonged periods of breast-feeding.

- **Chapter Two: Literature Review**
  Relevant literature is discussed to highlight important issues, namely some aspects of breast-feeding and issues related to weaning.

- **Chapter Three: Methodology**
  A detailed description of methods used are presented. This chapter deals with the research design, research instrument, population and sample, data collection and statistical analysis.

- **Chapter Four: Results / Data Analysis**
  This chapter summarises the results of the analysis. It consists of interpretation, discussion and presentation of collected data.

- **Chapter Five: Discussion of Conclusions and Recommendations**
  This chapter is devoted to a discussion of the interpretations, limitations, recommendations and implications of the findings of the study.
CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

In this chapter the views and opinions of various authors are discussed. In reviewing the literature, the following libraries were utilised:

- A compiled bibliography by the librarian of the University of South Africa, in which the key terms were breast-feeding, weaning, weaning practices, and health education on weaning. The programme used was the Cumulative Index to Nursing and Allied Health Literature, Medline, Sociofile and Social Sciences Citation Index. From these sources literature on the key terms was obtained.

- The Coronation Nursing College library, provided information on the key terms.

- The South African Nursing Association (SANA) library: Various references from the National Nursing Research Register (1993) and articles from the SANA library were reviewed.

The review of literature in this study is related to the following:

- Some aspects of breast-feeding, namely, the advantages of breast-feeding, promotion of breast-feeding and the duration of breast-feeding.
Weaning

* factors leading to early weaning
* methods of weaning
* problems associated with weaning

Health education of mothers about weaning, guidance and counselling of mothers during weaning.

2.2 BREAST-FEEDING

Information from literature and research reports will be outlined in this section. The viewpoints of different authors regarding the advantages, promotion and the duration of breast-feeding will be discussed, since these are factors that influence weaning and the weaning period. Promotion of breast-feeding and education of mothers about the advantages of breast-feeding, may motivate mothers to breast-feed as long as possible. By breast-feeding longer, the mother ensures that she and her baby enjoy the benefits of breast-feeding.

The Oxford Dictionary (Hornby, et al. 1983: 103) defines breast-feeding as "feeding a baby from the breast or to suckle". Weaning a baby off the breast, is a final part of breast-feeding. It is important to describe the advantages, promotion and the duration of breast-feeding because this information provides background knowledge about weaning. This information could provide the necessary guidelines for proper management of the weaning period.
Unfortunately, a mother who breast-feeds her baby for prolonged periods may experience problems when weaning her baby off the breast because breast-feeding provides love, comfort and security for the baby (Dettwyler 1987: 633; NHPD 1992: 18). A baby may be upset by the withdrawal of breast-feeds and the mother may feel guilty when her baby cries for the breast-feeds. (Bottorff 1990: 201). In lower socio-economic groups where a baby’s diet may be inadequate at the time of weaning, he or she could end up with malnutrition, or infections due to poor hygiene or withdrawal of the mother's antibodies found in breast milk (Kibel & Wagstaff 1995: 84).

2.2.1 Advantages of Breast-feeding

The WHO and UNICEF (1989: 3) state that breast-feeding is an unequaled way of providing food for the healthy growth and development of infants and has a unique biological and emotional influence on the health of both the mother and the child.

Experts in the field of child health agree that breast-feeding has many advantages such as:

2.2.1.1 Psychological benefits for mother and baby

Breast-feeding has psychological benefits for the mother and her baby which subsequently have an impact on the weaning process.

- Mc Call Sellers (1993: 235) states that breast-feeding is a satisfying emotional experience for the mother and her baby. She enjoys watching her baby suckle from her and also feels that it is she herself who is helping
her baby grow.

- Breast-feeding provides love, comfort and security for the baby, for example, a crying or sick child may be pacified with the breast. Some mothers even use it to put the child off to sleep (Dettwyler 1987: 633; NHPD 1992: 18).

- It is generally believed that breast-feeding forms a bond between a mother and her baby (Mc Call Sellers 1993: 235; Shore, Keet & Harrison 1987: 69,77; Wrigley & Hutchinson 1990: 35; Department of Community Education 1995: 5).

2.2.1.2 Convenience and availability

Mc Call Sellers (1993: 235–236) gives the following reasons for this convenience:

- Breast milk is at the correct temperature and is always available, which means that the mother does not need to wake up in the middle of the night to prepare a bottle for her baby.

2.2.1.3 Cost effectiveness

- According to Mc Call Sellers (1993: 235–236) breast-feeding saves on time and money for equipment, for example, bottles do not have to be sterilized, which is costly.
Breast-feeding saves on doctor’s fees because of a reduction in respiratory infections and diarrhoea. Breast milk contains antibodies which protect a baby against infections (Royle & Walsh 1992: 445). Artificial feeding may be associated with diarrhoea if there is contamination of milk during preparation (Kibel & Wagstaff 1995: 4).

2.2.1.4 Reduction in morbidity and mortality amongst babies


Malnutrition can be prevented by breast-feeding as long as possible. A malnourished child is more susceptible to infections since his/her resistance is low (Forum for Primary Health Care 1994: 3–7; Peace–McLeod 1993: 1; Vlok 1993: 50).

2.2.1.5 Correct constituents and composition for the baby — nutritionally balanced

Breast-milk is the natural food for a human baby since it has all the correct constituents in appropriate proportions for the baby. There are no risks of errors in the preparation of a feed, which may be harmful for the baby (Mc Call Sellers 1993: 235; Mott, James & Sperhac 1990: 417–418).
2.2.1.6 Acts as a contraceptive

During exclusive breast-feeding a woman is less likely to fall pregnant (Roux 1995: 128). Under the stimulus of breast-feeding, many women remain anovulatory for several months (Peace-McLeod 1993: 5; Royle & Walsh 1992: 787). Although breast-feeding delays the onset of menstruation, it is important that mothers realise that further pregnancies can occur, breast-feeding should therefore not be seen as a contraceptive method (Davies 1991: 65).

Brownlee (1990: xiii) warns that breast-feeding gives a thirty percent protection against pregnancy. A traditional practice found in many developing nations is that a woman who is breast-feeding her baby, should not have sexual intercourse during the period of lactation. In such cases sexual abstinence by the woman forms the basis of lactation contraception (Theron 1987: 46).

2.2.1.7 Promoting involution of the uterus

The act of suckling at the breast helps with involution of the uterus after delivery (Ajayi 1988: 144; Mc Call Sellers 1993: 235). Breast-feeding causes contraction of the uterus and thus leading to involution.

2.2.2 Promotion of breast-feeding

In view of the advantages of breast-feeding, it is imperative for every health worker to promote breast-feeding. Mothers should be encouraged to
breast-feed as long as possible to ensure optimum benefit from breast-feeding. Hoverd & Brown (1986: 206) state that breast-feeding can be promoted by discouraging mothers from thinking that bottle feeding is superior to breast-feeding and making mothers aware of the disadvantages of bottle feeding. The disadvantages of bottle feeding among others are contamination of milk and equipment leading to diarrhoea.

The WHO and UNICEF (1989: 8—9) point out that health workers should be prepared or trained in promoting and supporting breast-feeding.


WHO and UNICEF (1989: iv) suggest the following steps for successful breast feeding:

- Every facility providing maternity services and care for the newborn baby should:

  * Have a written breast-feeding policy that is routinely communicated to all health care staff.
  * Train all the health care staff (nurses) in skills necessary to implement this policy.
* Inform all pregnant women about the benefits and management of breast-feeding.

* Help mothers initiate breast-feeding within a half-hour after birth.

* Show mothers how to breast-feed, and how to maintain lactation even if they should be separated from their infants.

* Give the newborn infants no food or drink other than breast milk, unless medically indicated.

* Practicing rooming-in, that is, allowing mothers and their babies to remain together for twenty four hours a day.

* Encourage breast-feeding on demand.

* Give no artificial teats or pacifiers to breast-feeding infants.

* Foster the establishment of breast-feeding support groups and refer mothers to them on discharge from the hospital or clinic.

Hospitals and clinics which follow the code or the above steps are designated "baby friendly" (Kibel & Wagstaff 1995: 86).

The South African Nursing Council (SANC 1984, R2589; SANC 1990, R2488) supports this approach by encouraging nurses to promote breast-feeding. This promotion of breast-feeding should be commenced at antenatal clinics and continue at postnatal and primary health and well baby clinics until the mother weans her baby. Breast-feeding can be promoted by educating the mother about the advantages of breast-feeding and by developing support systems. Ntombela (1994: 21) states that support groups for lactating mothers are necessary in order to fill the gap of the lost traditional extended family. The functions of these support groups, include among others, formal and informal talks about breast-feeding and weaning. Other functions involve listening to a mother who has problems and advising a mother about lactation and child care. The child care should include correct weaning practices.

2.2.3 The duration of breast-feeding

The duration of breast-feeding should allow the mother and her baby to have optimum benefit from breast-feeding. The WHO and UNICEF (1989: 6; 1988: 7) strongly recommend exclusive breast-feeding for the first four (4) to six (6) months of life. During the above-mentioned period, breast-milk alone is sufficient and ideal for the baby's growth because the baby's gastrointestinal tract is not mature enough for introduction of solids.

After the first four (4) to six (6) months of life, solids are introduced to the baby. At this stage breast milk alone becomes inadequate for the baby, and he/she shows readiness for other foods (Castiglia 1992: 38–39). This readiness for other foods may be demonstrated by signs of hunger in the baby, such as crying, restlessness and development of swallowing movements (Birkbeck 1992: 221). Hendricks and Budraddin (1992: 125) further state that weaning...
recommendations are based on nutritional needs, physiologic maturation and the behavioural and developmental aspects of infant feeding.

The duration of breast-feeding is influenced by various factors such as culture, socio-economic circumstances, availability of artificial milk and attitudes. In developed societies women tend to breast-feed for shortened periods (Vlok 1993: 546). The reason for this could be availability of artificial milk and employment (Duckett 1992: 702; Moore, Bianchi-Gray & Stephens 1991: 383). On the other hand, women in traditional societies tend to breast-feed longer than those in modern societies. Bottorff (1990: 201) states that in traditional societies women have no alternative, but to breast-feed because other forms of milk are not available or affordable. This suggests that the availability of artificial milk and a higher socio-economic status which may prevail in developed countries, could lead to early weaning of babies from the breast.

Research by Wrigley and Hutchinson (1990: 35) showed that not only are more mothers beginning to breast-feed their babies, they are also breast-feeding for longer periods. This could be related to the fact that mothers are becoming aware of the benefits of breast-feeding and their rights as individuals. Jubber (1991: 30) agrees that in recent decades, there is a return to breast-feeding as the most popular and widely medically approved method of infant feeding. In South Africa student nurses, and student midwives working in hospitals and clinics are taught by their nurse educators to encourage mothers to breast-feed as long as possible. By the time the mothers wean their babies off the breast their babies must be on a mixed diet (Kibel & Wagstaff 1995: 86).
Mothers from lower socio-economic groups should be encouraged to breast-feed as long as possible (UNICEF, WHO & UNESCO 1989: 21; Rao & Kanade 1992: 187; Vlok 1993: 598). By breast-feeding as long as possible, for example, beyond two years, the mother prevents malnutrition since milk is expensive. She also prevents diarrhoea and respiratory infections. Zive (1992: 1104) states that a longer duration of breast-feeding and a later introduction of solids may protect against excessive adiposity in infancy.

Since breast-feeding is cost-effective, mothers from lower socio-economic groups should be encouraged to breast-feed for longer periods. UNICEF, WHO and UNESCO (1989: 21) recommend that mothers from lower socio-economic groups should breast-feed up to two years. This recommendation is supported by various South African authors such as Vlok (1993: 589), Kibei and Wagstaff (1995: 86) and NHPD (1992: 18–19). Harrison, Brush and Zumrawi (1992: 278) state that breast-feeding ensures proper weight gain in the first year. A mother who has received adequate education about breast-feeding, will make the correct choice for her and her baby concerning the duration of breast-feeding.

2.2.4 Contra-indications of breast-feeding

Although breast-feeding is beneficial for a mother and her baby, it may sometimes be contra-indicated as it may harm the baby or the mother (Kibel & Wagstaff 1995: 87). The following are some of the examples of contra-indications of breast-feeding:

- If some drugs, for example lithium, are taken by a lactating mother, they may cause serious side effects in the baby. Kaplan, Sadock & Grebb
(1991: 878) state that lithium can cause toxicity resulting in diarrhoea, vomiting, confusion, drowsiness, tremor, apathy, giddiness, muscle rigidity, impaired consciousness, coma, seizures and cardiovascular collapse.

- A severely ill mother whose own health would be compromised by breast-feeding, should not do so.

- A psychotic mother may harm her baby if she breast-feeds (Kibel & Wagstaff 1995: 87). A psychotic mother could hallucinate and hear voices telling her to kill her baby.

- When a mother suffers from AIDS or is HIV (human immune deficiency virus) positive, she may infect her baby. This is however a controversial issue. Evidence exists that the human immunodeficiency virus may be transmitted by breast milk, but the consequences of not breast-feeding in underprivileged societies may far outweigh any such risk, and the baby may be already be infected (Kibel & Wagstaff 1995: 87). The baby could have been infected during pregnancy or birth.

2.3 WEANING

Weaning is a process whereby a child is encouraged to give up breast or bottle feeds and to accept other foods (Castiglia 1992: 38; Hervada & Newman 1992: 223; Uddoh 1988: 121; Barker 1991: 106). Kibel and Wagstaff (1995: 91) see weaning as cessation of breast-feeding or the introduction of a transitional diet. The latter, is a process which lets the infant gradually become
accustomed to a full adult diet.


Holmes (1991: 200) states that infants grow rapidly during the first year of life, and by the end of the year the weight trebles. Such intense growth requires considerable nutritional support. Therefore correct weaning methods are very important in ensuring this rapid growth of the baby.

Hervada and Newman (1992: 235) believe that the process of weaning is affected by cultural, social, developmental and psychological factors, namely

* Factors which lead to early weaning
* Weaning methods used by various mothers during weaning
* Education of mothers about weaning
* Guidance and counselling of mothers during weaning.

2.3.1 Factors which may lead to early weaning

There are many varied factors which may lead to early weaning, and it is important for health workers employed in antenatal, postnatal and well baby clinics, to be aware of them so that they may take part in their elimination.
These factors interfere with the duration of breast-feeding since mothers may decide to wean their babies off the breast sooner.

The factors which lead to early weaning are:

* Failure to accept breast-feeding in public places

Bottorff (1990: 203) criticises societies which allow exposure of breasts only on the beach, yet the same societies frown upon mothers who breast-feed their babies in public. Breast-feeding should be seen as a way of nourishing a baby, just like an adult would have his lunch in public without fear of being victimised.

This non-acceptance of breast-feeding in public, is behaviour found in western societies (Bottorff 1990: 203). Mothers are expected to breast-feed in privacy, since breast-feeding in public is a taboo in these societies. This attitude towards breast-feeding makes it difficult for mothers to breast-feed their babies in public because there may sometimes be no special places for mothers to sit and breast-feed. South African authors such as Kibel & Wagstaff (1995: 87) state that "breasts may still be perceived exclusively as sex symbols ... and there is also a belief that breast-feeding will permanently alter breast size or shape". Non-acceptance of breast-feeding in public places exists in South Africa.

According to research done in Mali by Dettwyler (1987: 637), mothers in this society may breast-feed their babies anywhere and whenever they wish. In this society there is total acceptance of breast-feeding in public.
Bottorff (1990: 207) agrees that acceptance of a breast-feeding mother by people around her is an important factor in persisting to breast-feed. This means that if she does not get the support she needs, she may wean her baby earlier. Therefore society should make it easier for a mother to breast-feed by accepting it and providing public rest-rooms where mothers can sit and breast-feed their babies.

No mother should be socially coerced to wean her baby off the breast. Kemp, Pilliteri & Brown (1989: 734) suggest that weaning a baby off the breast, should be based on the parents' and the infants' preferences.

* Introduction of feeding bottles to a breast-fed baby may lead to early weaning


The NHPD (1992: 18–19) and the Breast-feeding Association of South Africa (1993: 8) view supplementation of breast-feeds before the first four months of life, as a problem because it may decrease the mother's milk flow and lead to early weaning. The breast-feeding Association of South Africa clearly states that "if a mother intends to breast-feed, no bottles should be given to the baby". Ntombela (1994: 20) states that advertising and marketing practices of infant food manufacturers must be monitored.
by support groups so that they do not encourage supplementation.

The reasons for this are:

Although a mother's breast milk supply may seem little during the first few days after delivery, it is adequate for a newborn baby. A mother should be encouraged to breastfeed her baby on demand, to stimulate more milk flow.

A baby who is given a bottle feed to supplement breast milk, may find that sucking from a bottle is easier than sucking from the breast, and thus stop drinking from the breast.

When breastfeeding is supplemented by bottle feeding, a baby may not get hungry. Such a baby will not drink from the mother's breast and she may assume that her baby does not want to drink from her breast any more. A mother should be made aware that the more her baby sucks from her breast, the more breast milk she will have. Failure to do this will result in a decrease in the breast milk flow, which may lead to early weaning.

* A mother who has no confidence in herself may wean her baby early.

Enraght-Moony (1993: 7) states that if mothers feel good about themselves and have confidence in their ability to meet their babies' needs, they succeed in breastfeeding. Successful breastfeeding leads to increased self-esteem, which in turn leads to good mothering. If a mother has a good self-esteem, she will have a positive cycle of family
relationships (Enraght-Moony 1993: 7).

A mother may lack confidence in herself because of inadequate knowledge about breast-feeding and weaning, for example, a mother may not know how to breast-feed or wean her baby.

Health education of the mother on breast-feeding and weaning is important in ensuring that the mother has the necessary confidence in herself. This health education could be commenced during pregnancy at antenatal clinic and continue after delivery at postnatal and well baby clinics, according to the mother’s needs (Moore, Bianchi-Gray & Stephens 1991: 383; Janke 1992: 52).

Health workers need to encourage mothers and promote their confidence and self-esteem. The mother’s self-esteem is boosted when she receives support and praise from health workers and her family when she breast-feeds her baby. Enraght-Moony (1993: 7) state that a study done at Coronation hospital revealed that women who received extra comfort, reassurance and praise from a companion during labour, developed a significantly greater self-esteem and confidence and were also far more likely to breast-feed their babies successfully.

* Maternal employment may lead to early weaning

A working mother or a mother who intends going back to work early, may decide not to breast-feed her baby at all (Moore, Bianchi-Gray & Stephens 1991: 383; Lindenberg, Artola & Estrada 1990: 35; Bergh 1993: 37; Duckett 1992: 702).
Weaning because of employment, demonstrates ignorance about breast-feeding and weaning. A mother can initiate breast-feeding before starting work and continue to do so even when she commences work. A working mother may breast-feed her baby before going to work and when she returns from work or when she is at home (Thomas & Prangley 1990: 85). In this way the mother and her baby can still enjoy the advantages of breast-feeding. A working mother benefits psychologically when breast-feeding because this experience gives both the mother and her baby the opportunity to be close (Kearney & Cronenwett 1991: 471; Morse, Harrison & Prowse 1986: 333; Duckett 1992: 701; Department of Community Education 1995: 4).

* A fussy demanding baby may cause the mother to wean her/him early

Moore, Bianchi-Gray and Stephens (1991: 383) state that a fussy demanding baby may lead to early weaning. This means that some mothers may be put off by babies who are continuously crying for the breast. Some mothers may even develop cracked nipples due to demand feeds. When this occurs, some mothers may choose to give bottle feeds. This behaviour demonstrates lack of motivation which may be due to ignorance about breast-feeding because a mother who is conversant with the advantages of breast-feeding will persevere so that her baby may benefit from it.

* A baby's sensitive gums associated with teething, may lead to early weaning

Castiglia (1992: 38–39) points out that sensitive gums which may be found in some teething babies might make a mother think that her baby is
no longer interested in drinking from her breast and thus wean her/him. Such behaviour shows that the mother has insufficient knowledge about breast-feeding and weaning.

* A decrease in the frequency of sucking from the breast by the baby and scheduled feeds

A decrease in the frequency of breast-feeds and scheduled feeds may lead to early weaning (Brownlee 1990: 7; UNICEF, WHO & UNESCO 1989: 19-20). This decrease in the frequency of breast-feeds and scheduled feeds leads to the decrease in the milk flow. Mothers should rather feed their babies on demand instead of scheduled feeds. With demand feeding, a mother will give her baby a feed whenever he/she wishes to drink from her and this is according to the baby's needs (Brownlee 1990: 7; UNICEF, WHO & UNESCO 1989: 19-20).

Initially after delivery, a baby will demand breast-feeds more frequently, and they will become less frequent as the baby becomes older. These frequent breast-feeds encourage the mother's milk flow.

When a mother's milk flow is reduced because of scheduled breast-feeds she may end up giving her baby artificial feeds to supplement the insufficient breast milk. In turn this aggravates the problem leading to early weaning.

* Lack of proper support systems may lead to early weaning

A mother requires effective support systems throughout her lactating and
weaning period. Dettwyler (1987: 633) describes the role of "doulas" in traditional societies. A "doula" is a woman whose functions amongst others, are to support, educate and guide the mother during breast-feeding and weaning. In traditional societies such as those in Mali, a mother is not alone during this period, but has the full support of a "doula" (Dettwyler 1987: 633).

Brownlee (1990: 29) expresses regret about the fact that this traditional support is dwindling, and points out that there is a need for community-based support for mothers. This lack of support in modern societies may also be seen as one of the causes of early weaning. In South Africa there is a Breast-feeding Association of South Africa (1993: 8) which encourages and promotes breast-feeding, by application of WHO/UNICEF statement on breast-feeding, as explained in section 2.2.2 of this chapter. Ntombela (1994: 20) acknowledges that the disappearance of traditional networks has led to the development of alternative mechanisms to answer the needs of new mothers. Even in Africa where people previously depended on the extended family for support, there is evidence of breakdown in traditional support systems. People have become dependent on mother support groups to nurture nursing mothers (Ntombela 1994: 20). Enraght-Moony (1993: 7) states that "professionals also have a role to play in facilitating support groups". The "professionals" include health workers working at antenatal, postnatal and well baby clinics. An experienced mother is a best teacher of breast-feeding and weaning. Enraght-Moony further explains that "health workers should encourage and facilitate breast-feeding support groups run by mothers who have breast-fed". Support groups can help women gain the confidence necessary for successful breast-feeding.
* Separation of the mother and her baby

Allowing a baby to sleep in a crib or even in his/her own room may discourage the mother from breast-feeding because the baby is far from her. It is easier for a mother to breast-feed a baby who is lying next to her (Lindenberg, Artola & Estrada 1990: 35).

* Availability of a support person to take care of the baby when the mother goes to work

According to Lindenberg, Artola and Estrada (1990: 35) availability of a support person to take care of the baby when the mother goes back to work may lead to early weaning. In this case it might seem convenient to use a bottle when the mother is not available to breast-feed her baby. When a mother has somebody reliable to take care of her baby, such as a family member or friend, it might be easier for her to wean her baby earlier and thus return to work. Yet a breast-feeding mother can still breast-feed her baby when she returns from work.

* A higher socio-economic status and a higher level of education

Various authors (Lindenberg, Artola & Estrada 1990: 35; Fagbule & Olaosebikan 1992: 92) agree that a higher socio-economic status and a higher level of education may lead to early weaning. Cow's milk is more accessible to these mothers, which makes it easier for them to wean their babies. These mothers may need to return to work. Some mothers may fear disfigurement of breasts which may be thought to be related to breast-feeding (Lindenberg, Artola & Estrada 1990: 35).
2.3.2 Weaning methods and practices

Mothers use different methods of weaning, some of which may be harmful for the baby. Incorrect weaning practices may lead to physical or psychological problems for the mother and baby. It is therefore important to discuss safe recommended methods of weaning and the harmful ones.

2.3.2.1 The recommended methods of weaning

Methods which are recommended by the WHO, UNICEF and UNESCO (WHO & UNICEF 1989: 6, 1988: 7; WHO, UNICEF & UNESCO 1989:21) will be discussed, since they are accepted by various authors throughout the literature search.

The above-mentioned organisations suggest that weaning should begin with systematic introduction of solids between the ages four (4) and six (6) months. This introduction of solids at four (4) months of age does not mean that a mother must stop breast-feeding, but she should actually continue to breastfeed as long as possible, for example, a mother may breast-feed up to two years. Before four (4) to six (6) months of age, breast milk alone is adequate for the baby's nutritional need and thereafter it is not longer adequate. Therefore introduction of solids at this age, prevents malnutrition and ensures that the baby adapts to a varied diet (UNICEF, WHO & UNESCO 1989; 21).

It is essential to introduce solids gradually. The first good food to give to a baby, along with breast milk is a soft, thick creamy porridge, made from the staple food of the community (WHO & UNICEF 1988: 9). This view considers the socio-economic aspects of the community, which means that the food is available, acceptable and affordable.
New food should be introduced one at a time, with at least three (3) to four (4) days elapsing before the next new food is introduced to the baby. This is done to check if a baby is allergic to any food so that it may be withdrawn if there is an allergy. If a variety of food is given simultaneously, it is difficult to determine the food to which the baby is allergic (NHPD 1992: 18–19).

The mother could start by giving the baby small amounts of food with a small shallow spoon, and then slowly increase the food. The food is placed over the baby’s tongue to make swallowing easier for him or her. If the baby does not like the food, the mother should simply leave the baby and try again at a later stage, or try other food (NHPD 1992: 18–19). By twelve (12) months of age the baby ought to be eating everything eaten by the family (WHO & UNICEF 1988: 21).

The final part of weaning is the termination of breast-feeding which should be gradual (Bennett & Brown 1990: 503). Gradual weaning should take place over several weeks. In this way the baby is given a chance to adjust to the new situation and the breasts will not become engorged and painful as in abrupt weaning. In gradual weaning, one breast-feed may be given up at a time per day and be replaced by a cup or bottle-feeding (NHPD 1992: 18–19; Bronner & Paige 1992: 51–52; Ladewig, London & Olds 1990: 654).

Weaning a child off the breast is not an easy decision, especially for mothers who struggled to establish and ensure the success of breast-feeding (Bottorff 1990: 203). Adamson (1987: 206) reports that breast-feeding does not come automatically to many women and new mothers need support and practical help until breast-feeding is established. Therefore preparation of a mother for weaning begins with education about breast-feeding. This education should
begin antenatally and continue postnatally, according to the mother's needs. Mothers should be educated about correct weaning methods to prevent diarrhoea and malnutrition (Ferrinho, Gear, Reinach & Bac 1991: 588).

Mc Call Sellers (1993: 675) suggests that mothers should get help from baby care clinics where advice about weaning is given and the baby's weight is monitored.

Since weaning is difficult, a mother should choose a time to wean, when she is not stressed by other problems. The mother needs the support of those around her, for example her family. She needs someone to lean on when her energy is low and she needs reassurance (Bottorff, 1990: 201–208). Therefore nurses who have contact with mothers, play an important role in guiding and supporting the mother (Bishop 1985: 213–214).

Various authors (Bumgarner 1982: 176; Ladewig, London & Olds 1990: 654; NHPD 1992: 18–19) suggest that the following measures will make weaning easier:

--- Support

Since weaning affects the mother and her baby emotionally, the mother requires support. The family can assist the mother with the baby when she is tired and stressed. Her family could take care of her baby so that she may rest when she feels tired. Mother support groups could play an important role in providing support for the mother (Ntombela 1994: 20–21).
Ntombela (1994: 20–21) describes the following functions of support groups:

* Giving informal talks on various aspects of breast-feeding, for example benefits of breast-feeding.

* Counselling on various problems, for example "insufficient" milk.

* Taking care of all the babies' needs.

* Mothers should be encouraged to share experiences about breast-feeding and weaning.

* Giving demonstrations to mothers, for example using breast-pumps.

* Mother support groups could also assist health workers at antenatal and post-natal clinics, maternity wards and well baby clinics.

* Monitor advertising and marketing practices of infant food manufacturers.

* Assist in lobbying for legislation to enable women to work and breast-feed.

* Actively support the "Baby Friendly" hospital/clinic initiatives.

* Network with other mother support groups and organisations.
Giving support to mothers should not be restricted to advice, information or counselling on breast-feeding. Support can also be:

- Just listening to a mother who has a problem, for example weaning problems.
- Giving the mother rest for an hour or two by looking after her other children.
- Advising a mother on other aspects of child care.

Information

Family members should be well informed about breast-feeding and weaning, so that they may provide a supportive role during weaning. This support could include correct and appropriate advice about correct weaning practices, encouragement and assistance with the baby when a mother is tired and stressed (Ferrinho, Gear, Reinach & Bac 1991: 11; Moore, Bianchi-Gray & Stephens 1991: 383).

Giving the baby love and attention

A baby who is given plenty of love and understanding during weaning will soon adjust to new situations. A mother who wishes to wean her baby, could have a "contract" or and "agreement" with a child about weaning him off the breast. This entails explaining to the child when and why he/she has to stop drinking from the mother. The contract between the mother and her baby may work if the baby is older and understands the
mother's explanations. Weaning could be coincided with a child's birthday or a child could be promised a new toy if he adheres to the contract (Bumgarner 1982: 176; NHPD 1992: 19).

- **Gradual weaning**

  Weaning a child off the breast, should be gradually done over two (2) to three (3) weeks (Keet, Shore & Harrison 1987: 69,77). Bumgarner (1982: 176) clearly states that during this period, a child should not be allowed to get hungry, because he/she will then demand to be breast-fed. This means that the child could be given feeds earlier to ensure that the child is never allowed to get hungry during weaning.

- **Distracting the baby from the breast**

  Bumgarner (1982: 176) recommends various ways of distracting a child from the breast, namely,

  * taking the child for a walk
  * reading story books
  * giving him old and new toys.

2.3.2.2 *The abrupt method of weaning*

One of the weaning methods used in some cultures is the abrupt method. In this case the breast-feeds are stopped and never given again. The weanling, that is, the baby who is been weaned from the breast, should be on solids.
A study on the abrupt method of weaning was done in Mexico by Milliard and Graham (1985: 229-233). In this study it was found that solids were only introduced when the child was taken off the breast. This method is dangerous since it does not give the baby a chance to adapt to new food. The baby is predisposed to malnutrition if he does not take the new food well. Other dangers of abrupt weaning include diarrhoea and respiratory infections due to withdrawal of antibodies from the breast-milk. Ideally, a baby should be on a well balanced diet before he is weaned off the breast (Milliard & Graham 1985: 229-233; UNICEF, WHO & UNESCO 1989: 15-21).

Some mothers may send a child to a relative who lives far from them, to avoid the temptation of breast-feeding when the child becomes upset (Jubber 1991: 30-33). This method of weaning seems to be cruel since it separates the mother and baby. The baby is then deprived of the mother’s love and attention, as well as the security and the comfort of breast-feeding. This may be confusing for the baby and it may induce guilt feelings and unhappiness in the mother.

Furthermore, abrupt weaning may lead to engorged breasts, mastitis or breast abscess. Engorged breasts cause unnecessary discomfort for the mother which can be prevented by gradual replacements of breast-feeds. The milk flow would decrease as the number of feeds are decreased and thus prevent engorgement of breasts (Bennett & Brown 1990: 503; WHO & UNICEF 1988: 1-6).
2.3.2.3 *Harsh or extreme methods of weaning*

Harsh methods of weaning are those which may be traumatic for both the mother and baby (Jubber 1991: 30).

The harsh methods include:

* Painting the breasts with distasteful substances such as
  
  - cactus juice
  - bitter jelly from leaves of aloe tree
  - strong spices
  - hot peppers
  - tobacco
  - garlic
  - aloe
  - soot


* Making the breasts repugnant by painting them or applying cotton wool or feathers, to frighten the baby.

* Verbally frightening a child from the breasts.

* Scolding the child.

* Emotionally abusing the child.

* Physical punishment.

* Sending the child to a relative.

Harsh methods of weaning are sometimes used for the following reasons:

- they may be culturally prescribed as the appropriate way to wean a child
- they may be all that is left to a desperate mother who has tried all the gentler ways of weaning, but failed (Jubber 1991: 30).

The WHO and UNICEF (1988: 8) do not encourage the use of these harsh methods, as they may be traumatic for both the mother and her baby.

2.3.2.4 "Baby led" or "parent led" weaning

Weaning can either be "baby led" or "parent led" (NHPD 1992: 18; Bishop 1985: 212). In baby led weaning, the baby decides to stop breast-feeding on his own. This is the easiest way of weaning. A baby does not always wean himself/herself, therefore a mother may have to choose a time to stop breast-feeding, which means that the weaning is parent led. In parent led weaning the mother initiates the weaning process, when she thinks her baby is old enough to be weaned, or ready to be weaned.

2.3.3 Problems which may be experienced by mothers during weaning

Bottorff (1990: 201) clearly states that weaning is difficult for both the mother and baby, therefore a mother may experience problems when weaning her baby. A study conducted in Cairo in poor neighbourhoods by Harrison, Zaghloul, Galal & Gabr (1993: 1063) revealed that weaning was perceived to be a difficult and dangerous transition.
2.3.3.1 Psychological/emotional problems

* Feelings of guilt

A mother feels guilty when weaning her baby off the breast. It may be a weaning time for both the mother and baby. The mother has to realise that she cannot go on breast-feeding forever and the baby has to adapt to new ways of feeding. Although mothers realise that breast milk is no longer a necessity for life but rather an extra, there is still hesitation to withdraw the breast. Stopping breast-feeding means more than withdrawal of milk or change of diet, but there are also emotional aspects to consider (Bottorff 1990: 201).

* Other emotional problems experienced by mothers during weaning

Emotional problems include:
- difficulty in comforting a child
- the mother may find it difficult to let go of her baby
- the mother may feel unhappy when weaning
- some mothers may worry that their babies will not love them anymore (Dettwyler 1987: 633; Bottorff 1990: 201–208; Bishop 1985: 211).

Comforting a crying, tired, sick or upset child becomes a problem for the mother, because she can no longer use the breast for this purpose (Dettwyler 1987: 633). A mother has to find new ways of comforting her baby.
A mother may wish to preserve the closeness between her and her baby, which is associated with breast-feeding. Such a mother may find it difficult to let go of her baby, yet she cannot go on breast-feeding forever (Bottorff 1990: 208). As the mother weans, her baby becomes gradually independent of her.

Bottorff (1990: 201–208) points out that a mother may feel unhappy when weaning her baby. This unhappiness may be a reaction of the mother to an upset baby, and she may have difficulty in comforting him or her. A mother needs support, reassurance and praise for having breast-fed.

Bishop (1985: 211) states that some mothers may fear that their babies will not love them anymore, if they wean them off the breast. Such a mother could have regarded breast-feeding as a way of providing love, security and comfort for her baby, and fears that she will not be able to provide these anymore. The Department of Community Education (1995: 4–5) encourages working mothers to continue breast-feeding because it strengthens the bonding relationship between mother and child. The working mother may fear to lose the special moments with her baby.

* Lack of support systems and information on weaning

Various authors (Brownlee 1990: 29; Dettwyler 1987: 633; Bottorff 1990: 201) agree that with development of societies, traditional support is dwindling. With urbanisation, family structures are changing; and extended families are replaced by nuclear families and/or single parent families. In these modern societies the mother may be isolated and deprived of any health education, guidance or counselling during weaning.
Bottorff (1990: 201) states that there is a need for some form of support during weaning, since it is a difficult time for the mother. In traditional societies a mother may receive this support since the family may be extended. In modern societies, this support which was previously provided by extended families is lacking. The support of the father and the family in the decision to breast-feed, will contribute considerably to the mothers success in breast-feeding (Breast-feeding Association of South Africa 1995: 9).

Bumgarner (1982: 183) suggests that a father could play an important role at night, when the child cries for the last feed, by consoling the child. Unfortunately, a father is not always available to perform this role because some mothers may be single. Kibel & Wagstaff (1995: 87) states that a father may be a valuable support person or he may feel jealous and excluded, during the breast-feeding period. Fathers could play an important role during weaning, by supporting the mother.

Health workers should play an important role in supporting the mother during weaning. This support should include health education of the mother about weaning because mothers may seek information from diverse people who may give them incorrect advice about weaning, for example, the use of harsh weaning methods (Castiglia 1992: 38–390).

According to Ntombela (1994: 21) it is necessary to form support groups for lactating mothers in order to fill the gap of the lost traditional family. The functions of the support groups are described in section 2.3.2.1, p. 37.
2.3.3.2 Physiological problems

* Lack of rest for the mother

A mother's sleep pattern may be disturbed by a baby who might be crying for the breast, at night. The breast-feeds were previously used to put the child to sleep and this night feed is the most difficult to withdraw (Bumgarner 1982: 22). This lack of sleep creates stress for the mother and she needs emotional support.

* Breast engorgement

Abrupt weaning leads to breast engorgement which may result in mastitis and breast abscess (Bennet & Brown 1990: 503; WHO & UNICEF 1988: 1–6). A description of this aspect is in section 2.3.2.2, p. 40.

2.3.3 Other problems in the baby

* Malnutrition, diarrhoea and respiratory infections

Breast milk may be the only source of protein for a baby from lower socio-economic groups. Although breast-milk alone may be inadequate after first six (6) months of life, Kibel and Wagstaff (1995: 91) state that if breast-feeding is extended into the second year of life, it can still make a useful contribution to the protein and energy intake of a child.

Weaning may result in malnutrition where there is lack of food (WHO 1988: 4). Malnutrition leads to a lowered resistance, and thus making the
child more susceptible to infections. Diarrhoea may accompany weaning, if eating or drinking utensils are not sterilised, or when food is contaminated (WHO 1988: 4; Rao & Rajpathak 1992: 1533; Mata 1992: 16–27; Henry, Patwary, Hutty & Aziz 1990: 79).

Other problems which may be associated with weaning may be weight loss or excessive weight gain. Adiposity is associated with artificial feeding but not breast feeding (De Beer 1995: 2).

* Emotional problems in the baby

An upset baby will create problems for the mother. The mother will in turn experience high levels of anxiety and stress (Bottorff 1990: 201; Bishop 1985: 211). The weaning problems may affect the whole family. Some babies may regress due to anxiety and frustration, and throw tantrums or even start wetting themselves because of emotional problems. Temper tantrums occur during eighteen months and three years of age and some mothers breast-feed longer than this period. The strong willed and increasingly independent child finds it difficult to conform and not have his way. Causes of temper tantrums include, among others insecurity, fatigue and hunger (Hancock 1992: 272; Cooke 1989: 236).

Edelman and Mandle (1990: 409) state that enuresis is a symptom of emotional problems. Bedwetting in a child who already has bladder control is associated with stress. This form of regression is a defence mechanism which is designed to avoid guilt and anxiety (Sacharin 1986: 317).
2.4 EDUCATION, GUIDANCE AND COUNSELLING OF WEANING MOTHERS

Education, guidance and counselling of breast-feeding and weaning mothers is important in elimination and prevention of problems during weaning.

In traditional societies, the role of teaching, guiding and counselling mothers during weaning, was done by women who were called "doulas", as discussed in section 2.3. "Doulas" were therefore regarded as women who were knowledgeable about breast-feeding and weaning and they were either relatives, neighbours or friends of the weaning mother (Dettwyler 1987: 633). Bottorff (1990: 206) states that a doula fulfils the role of encouraging, supporting and helping a new mother, and he goes on to say mothers seem to need this support and seek it from others. Like the rest of Africa, South African women also previously received encouragement, information and moral support from relatives, friends and neighbours in their societies (Ntombela 1994: 20-21).

Since traditional support is dwindling, there is now a need for a community-based breast-feeding counselling service to ensure successful breast-feeding and weaning (Moore, Bianchi-Gray & Stephens 1991: 383-384; Ntombela 1994: 20-21). Health workers practising in areas such as antenatal, postnatal, and well baby clinics could play an important role in providing this service. Their functions would include infant growth monitoring, teaching mothers about weaning, guiding them and counselling them on weaning, when they attend clinics or encounter problems (Ruel & Habicht 1992: 1772-1778; Mc Call. Sellers 1993: 675). Bishop (1985: 213) and Castiglia (1992: 38-39) suggest that community health nurses should play an important part in this
supportive role and act as resource persons, for example, provide mothers with information about breast-feeding and weaning, and counsel them when there is a need.

Das, Talukder & Sella (1992) suggests that mothers should be trained and motivated on weaning practices for timely and adequate supplementation to prevent malnutrition.

Teaching of the mother about breast-feeding and weaning should begin during pregnancy, and carry on until the child is weaned. A mother who receives prenatal health education on breast-feeding may breast-feed longer, since she will know the advantages of breast-feeding, the best time to wean her baby and the correct method of weaning. Bottorff (1990: 201–208) states that the mother who receives this support, will persist to breast-feed. This suggests that mothers who do not receive this support will wean earlier or even use incorrect weaning methods.

Moore, Bianchi-Gray and Stephens (1991: 383) believe that providing timely advice and support to breast-feeding mothers, is essential for successful breast-feeding, and thus decreasing the chances of early weaning. The above-mentioned authors state that health workers employed in post-natal wards or clinics continue to be uninformed about the recent advances in breast-feeding knowledge, and therefore provide incorrect and inconsistent information to mothers. Moore, Bianchi-Gray and Stephens (1991: 383) acknowledge that knowledgeable people such as well informed nurses are often unavailable to the mother, after discharge from hospital, and frequently family members are uninformed about breast-feeding and weaning. This means that the mother is exposed to uninformed people at the hospital and at home; the disadvantage
of this situation is that the mother may receive incorrect advice about weaning methods. The policy of Coronation hospital antenatal and postnatal clinics is to promote breast-feeding and give mothers health education on breast-feeding. The policy is based on the joint WHO/UNICEF statement (1989: iv), which is discussed in section 2.2.2 of this chapter.

Ferrinho, Gear and Reinach (1991: 11) recommend that health services should promote appropriate nutritional education, starting with antenatal care, and continue after delivery. Health workers should be trained in this regard, so that they give correct advice to mothers.

Guidance of mothers at the clinics, should include the following:

- encouraging mothers to continue breast-feeding
- advising mothers to introduce the correct type of solids to the baby, at the correct age
- the weaning process.

2.5 CONCLUSION

In this chapter, views of various authors concerning weaning and some aspects relating breast-feeding were outlined, and they may be summarized as follows:
2.5.1 Aspects of breast-feeding

- The advantages of breast-feeding
  The literature revealed that the mother and the baby benefit psychologically, physiologically and economically from breast-feeding.

- Promotion of breast-feeding
  Breast-feeding should be promoted because of its advantages. Various authors and organisations, such as the World Health Organisation, the United Nations Children Fund, the South African Nursing Council and the ANC Health Plan promote breast-feeding in order to prevent malnutrition, respiratory infections and diarrhoea in children.

- The duration of breast-feeding is influenced by cultural, traditional and socio-economic factors. Developed societies tend to breast-feed for shorter periods whereas underdeveloped societies tend to breast-feed longer.

2.5.2 Weaning

Factors which lead to early weaning include:
- lack of knowledge about breast-feeding and weaning
- lack of support for mothers from their societies
- early supplementation of breast feeds with artificial feeds
- a higher socio-economic status of the mother
- a working mother
- rigid feeding practices.
As far as the methods of weaning are concerned, the literature revealed that weaning should begin with systematic introduction of solids at four (4) to six (6) months of life. Introduction of solids does not mean that the mother must stop breast-feeding but she should continue beyond two years. Abrupt and harsh methods of weaning are discouraged as they may cause harm to the mother and her baby.

The literature revealed that some mothers and babies experience psychological and physiological problems during weaning. The psychological problems include guilt feelings, stress and sadness in the mother. The physiological problems are breast engorgement in the mother, malnutrition, and respiratory infections and diarrhoea in babies.

According to the literature there is a need for health education, guidance and counselling of mothers about weaning. Health workers should play an important role in this aspect since traditional support is dwindling.

The following chapter will deal with the methodology used for this study.
CHAPTER 3

METHODOLOGY

3.1 INTRODUCTION

This chapter deals with the research design, research instrument, population and sample, data collection and statistical analysis.

The purpose of the study was to determine the type of problems experienced by mothers at the time of weaning, after prolonged periods of breast-feeding, and to investigate if these mothers received any guidance or support to cope with these problems.

The objectives of the study are stated in chapter one of this study (section 1.4).

3.2 THE RESEARCH DESIGN

A research design is an overall plan for collecting data and analysing data, including specifications for enhancing the internal and external validity of the study (Polit & Hungler 1995: 652, 139).

This study will be a descriptive study. The design of this study consists of a literature review and descriptive survey. A survey is a non-experimental study in which the researcher investigates a community or a group of people
and this may be done by interviewing, observing what people are doing, by telephonic interviews or questionnaires (Treece & Treece 1986: 175). The research strategy is descriptive because it is designed to summarise the status of problems related to weaning after breast-feeding for nine (9) months and longer.

Data was collect from a sample of mothers who breast-fed their babies for nine (9) months and longer, by means of questionnaires and interviews.

3.2.1 Literature study

A detailed literature study as discussed in chapter 2 was done in order to collect valuable information with regard to the aspects relevant to this study. This enabled the researcher to proceed with the required research with more insight to its objectives.

The findings of the literature study revealed that research on weaning problems experienced by mothers after breast-feeding for nine months or longer, was previously not done in South Africa. Various international authors, acknowledge that there are psychological, physiological and economical benefits of breast-feeding and encourage mothers to breast-feed for long periods, especially those mothers from lower socio-economic groups. The researcher found little information on problems encountered by mothers during weaning, after breast-feeding for long periods (nine months or longer). However various authors do acknowledge that termination of breast-feeding is a difficult period for the mother and baby. Therefore, some mothers experience problems during the weaning period. When mothers take their babies off the breast, they often use harsh methods of weaning. Various
authors recommend health education of weaning mothers on correct weaning methods. They also recommend guidance and support of mothers during weaning.

3.3 DELIMITATION OF THE STUDY

This study is limited to the antenatal and postnatal clinics at Coronation hospital. The hospital is situated in Johannesburg, nineteen (19) kilometers South West of the Central business district near Newclare, Westbury and Coronationville suburbs.

The reasons for selecting these clinics are inter alia the important role they play in the promotion of breast-feeding and health education of mothers on breast-feeding and weaning in that area. These clinics provide a vital aspect of primary health care. Ferrinho, Gear, Reinach and Bac (1991: 11) recommend that health services should promote appropriate nutritional education, starting at antenatal health services.

Community health services around Coronation hospital have till thus far been fragmented. The community based clinics have not been providing an antenatal and postnatal service which is an important part of primary health care and comprehensive health care, therefore Coronation hospital forms an important link. Mothers who visit the antenatal and postnatal clinics will also visit the other community based clinics at a later stage.

The best time to initiate health education on breast-feeding would be during pregnancy at antenatal, at postnatal and at well baby clinics, by promoting
3.4 POPULATION AND SAMPLE

The population studied, consist of mothers who attended antenatal and postnatal clinics at Coronation hospital and they previously breast-fed their babies for nine months or longer. Polit and Hungler (1995: 229) define a population as the entire set of individuals having some common characteristics or meet a designated set of criteria. Since it was not possible to include the entire population in the study, a sample was selected. Polit and Hungler (1995: 229) define a sample as a subset of a population selected to participate in a research study.

In this research project the non-probability accidental/convenient sample was used, which means that the most readily available persons or objects would be used in the study (Polit & Hungler 1995: 232, 635).

The sample for this study was limited to mothers who attended antenatal and postnatal clinics during the months October and November 1993. From these mothers only those who breast-fed their babies for nine (9) months or longer participated in the study. The researcher went to the clinics every morning (07:30 – 09:30) during October and November 1993 and requested all mothers who breast-fed their babies for nine (9) months or longer to participate in the research. The request was verbal and the mothers were made comfortable in a special room, to ensure confidentiality. The mothers gave permission to participate in the study and their response was good. The sample consisted of 150 mothers who were between the ages sixteen and fifty years.
The researcher gave questionnaires to mothers for completion and interviewed those who asked for help with the completion of questionnaires. The researcher handled between three and six mothers per day over a period of two months. Of the 150 respondents, thirty two (32) were seen at the postnatal clinic while the remaining respondents were seen at the antenatal clinic.

3.4.1 Ethical considerations

Ethical considerations include protecting the subjects from physical and psychological harm. A researcher should obtain informed consent from subjects. Anonymity, justice and confidentiality of subjects should be maintained by the researcher (Polit & Hungler 1995: 118–120).

3.4.2 Permission to conduct the study and confidentiality

Permission to do research at Coronation hospital was requested by means of letters to the following officials:

- The Director of Hospital Services, the Superintendent of Coronation hospital, the Chief Nursing Service Manager, the Zone Nursing Service Manager, the Senior Professional Nurse in the antenatal and post-natal clinic at Coronation hospital.

(Refer to addendums 1 and 4 for letters.)

The researcher also requested permission from individual mothers, after briefing them about the research. Confidentiality was assured throughout the study. Mothers were assured that the researcher was not part of the antenatal and post-natal staff so as to lessen their fear of being victimised.
3.5 RESEARCH TECHNIQUE

A survey, using a questionnaire (Addendum 2) was the technique for obtaining data.

3.5.1 Pre-test of the instrument

In preparation for the research project, the researcher conducted a pre-test on ten (10) mothers at antenatal and postnatal clinics at Coronation hospital from 22 to 23 July 1993. The ten (10) mothers were excluded from the study.

Pre-testing refers to trial administration of a newly developed instrument with the purpose of identifying flaws in it or assess time requirements (Polit & Hungler 1995: 650). The researcher determined that completing the questionnaire would take twenty minutes.

The pre-test gave the researcher an opportunity to test the questionnaire (Addendum 2) and to measure the respondents' understanding of questions, as well as whether they gave complete and pertinent answers. Where necessary, changes were made to the questionnaire as indicated in par. 3.5.2.3, in order to eliminate irrelevant questions, to clarify unclear questions and to make the instrument generally more effective.

The pre-test also gave the researcher an opportunity of arranging a place where the respondents could complete their questionnaires and organise a place for interviews, to maintain confidentiality. The various languages used by respondents were identified for future communication purposes.
The data collecting instrument was pre-tested to ensure its reliability, that is, its accuracy and consistency and to ensure its validity which refers to the degree to which the questionnaire measures what it is intended to measure. This was done by elimination of irrelevant questions, rephrasing of unclear questions as explained in par. 3.5.2.3, and asking colleagues and the supervisor to evaluate the tool to make it more effective.

3.5.2 The data collection instrument

3.5.2.1 The type of instrument

In this study, a questionnaire (Addendum 2) was used to collect data from the mothers. Although the questionnaire was prepared in English, the researcher was aware of the other languages spoken by the mothers and she interpreted for them. The questionnaires were administered to the mothers by the researcher. The mothers were made comfortable in a special room at antenatal and postnatal clinics. Mothers who encountered problems in completing the forms, requested help from the researcher. In this instance the mothers were interviewed and the completion of the questionnaire was done by the researcher. The researcher conducted each interview privately in a separate room to ensure confidentiality.

Polit and Hungler (1995: 643) state that an instrument is a device or technique that a researcher uses to collect data, for example a questionnaire, tests or observation schedule. According to Treece and Treece (1986: 151) the types of instruments which can be used in a survey are questionnaires, interviews which can be face-to-face or telephonic conversations.
3.5.2.2 Description of the data collection instrument

A questionnaire was used to collect relevant data. A total of sixteen sections (A - P) were included. The questions were constructed as open-ended questions with alternatives being available to select an answer from. The first part on the first page of the questionnaire contained instructions for completion of the questionnaire. The questions were prepared in English. The researcher interviewed those mothers who had language difficulties and interpreted for them into the languages they understood, namely Sotho, Zulu or Afrikaans.

A questionnaire refers to an instrument which was used to collect data from mothers, and it consisted of a set of questions in a paper-and-pencil format, with the purpose of collecting data pertinent to the study (Polit & Hungler 1995: 643).

The same questionnaire was used by the researcher for interviewing those mothers who had difficulty in reading the questionnaire or answering the questions in writing. In these cases the questionnaire was used as an interview schedule.

An introductory letter accompanied the questionnaire, although the communication between the researcher and the mothers was verbal.

The data collection instrument was developed by the researcher after perusal of relevant literature.
The instrument consisted of sixteen (16) sections (A - P). Refer to Addendum 2 for the questionnaire.

* Section A to E

The questions dealt with personal data namely:

- the age of the mother at the time of weaning
- qualifications
- marital status
- type of family
- occupation

Response to these questions provides background information about the mothers, which could have an influence on health information. Factors dealt with in these sections, may influence the duration of breast-feeding and weaning practices, for example, educated mothers breast-feed for shorter periods because they have the means to feed their infants artificially (Lindenberg et al. 1992: 35).

* Section F and G

These sections determine:

- whether the mother ever received health education on weaning,
- where and from whom the mother learned about weaning.
Responses from these sections will reveal whether health workers give mothers health education on weaning and from who or where else they got information about weaning.

* **Section H**

This section deals with the duration of breast-feeding of previous children and whether the mothers encountered problems during weaning and the types of problems experienced by these mothers.

* **Section I**

This section determines with which child (e.g. first child) the mother had the most problems.

The child must have been breast-fed for nine (9) months or longer. If the mother did not experience any problems with any of her children she will then refer to her first child who was breast-fed for nine months and longer.

The following questions will then be based on this question.

* **Section J**

This section addresses reasons for weaning. The data from this section will provide background information as to why mothers wean their babies.
* **Section K**

This section deals with the type of feeding at the time of weaning. The response will show whether the child is on a bottle, cup and will also reveal the type of diet the child is on.

The purpose of such information is to reveal weaning practices used by some mothers.

* **Section L**

This section determines whether the mother and/or baby enjoyed the breast-feeding.

These questions were included to determine the mother's attitude to breast-feeding.

* **Section M**

This section is about the duration of weaning the baby off the breast. The response will show whether the mother weaned abruptly or not.

* **Section N**

This section deals with the practices of weaning, used by mothers, such as binding, breasts which is associated with abrupt weaning, use of medication, application of distasteful substances to breasts, gradual weaning and leaving the child with a relative.
**Section O**

This section looks at the actual problems experienced by the mother and baby.

**Section P**

Section P consists of five subsections which determine the mothers views and knowledge about some aspects of weaning, namely

- if mothers need health education about weaning,
- whether mothers need counselling and guidance from nurses during weaning,
- if mothers know that a baby should be on a family diet before he is weaned off the breast. The purpose is to prevent malnutrition. (A detailed description of this matter is in chapter 2 section 2.3.3.3.)
- if mothers think or know that they should explain to an older child who is being weaned why breast-feeding has to stop. An older child may understand, and an agreement may be reached between the mother and the child,
- if the mother knows or thinks that the baby should be given more love and attention during the weaning periods.
3.5.2.3 Final preparation of the instrument

After the pre-test of the questionnaire, some alterations were made in the questionnaire. Since the open-ended questions for example "What is your occupation", were not answered by the respondents, they had to be rephrased or altered. Section E, initially consisted of the question: "What is your occupation?" (Section E). This section was replaced by a classification of occupations from which the respondent had to select the appropriate answers.

The question (Section N2) "What medication did you take to dry breast milk?" was dropped since it was not answered. The actual name of the medication was not important or relevant. Therefore the mother had to only indicate whether she took medication to dry her milk or not, instead of actually naming the medication.

It was determined that it would take twenty minutes to complete the questionnaire.

3.5.3 Data collection

A full discussion of the instrument is in section 3.5.2.2 of this chapter.

The researcher handed out questionnaires personally to all the one hundred and fifty (150) subjects at antenatal and post-natal clinics. One hundred and five (105) mothers completed the questionnaires on their own, while forty five (45) mothers were interviewed because they requested help, as they had difficulty in reading, writing or understanding the questionnaire.
The questionnaires were printed in English. Where there was a language problem in understanding the questionnaire, the researcher interviewed the subjects and interpreted the questions for them. When the mothers were Afrikaans, Sotho or Zulu speaking, the researcher could interpret for them.

3.5.3.1 *Interviews*

When the respondents encountered problems with reading the questionnaire and answering questions in writing and when they requested help from the researcher, she conducted interviews and completed the questionnaires for the respondents. Interviews were done privately in a special room at the antenatal and postnatal clinics at the Coronation hospital. Each interview lasted 20 minutes, and each respondent was respectfully handled. Rapport was established by being friendly, considerate, patient and by reacting diplomatically to non-verbal cues from respondents.

3.6 **STATISTICAL ANALYSIS**

The information had to be converted to a machine readable form because a computer was used. The programme, Statistical Analysis System, Version 6 for UNIX, was used. Numerical coding was used for this purpose. Polit and Hungler (1995: 483) define coding as the process of transforming raw data into a standardised form (usually numerical) for processing and analysis. This was done with the assistance of the Computer Service Official and a statistician at UNISA.

The results are discussed in chapter 4 of the study.
3.7 SUMMARY

This chapter contains the description of the: design, setting, population and sample, instrument, data collection and data analysis. The next chapter contains the analysis of data.
CHAPTER 4

ANALYSIS AND DISCUSSION OF DATA
AND PRESENTATION OF FINDINGS

4.1 INTRODUCTION

The statistical information that is presented in this chapter is collected from completed questionnaires and interviews. The researcher interviewed forty five (45) respondents and 105 completed the questionnaires on their own. This chapter consists of interpretation, discussion and presentation of data. Certain aspects of analysed data are presented in a form of figures and tables, followed by discussions and/or comparison with findings from the literature review. The findings and the discussion of data are presented in sections A to P, and are organised according to the questionnaire. Some frequencies will range between 147 – 150 because some of the 150 respondents did not answer all the questions and this will be reflected in the relevant figures and tables.

The items are analysed and presented as they appeared in the questionnaire.

4.2 PERSONAL DATA OF THE RESPONDENTS

4.2.1 The age of the respondents (Item A) $n = 150$

This item was included to enable the researcher to identify the age distribution of the respondents, and to develop a clear picture of the
population under study. It was found that of the 150 respondents, ninety five (63.3%) were in the age group twenty to twenty nine, while two (1.3%) of the 150 respondents were above the age of forty years.

The age group of the respondents is outlined in figure 4.1.

Figure 4.1

The age of the respondents at the time of weaning

\[
\% = \text{percentage} \ (n = 150)
\]

4.2.2 Qualifications of the respondents (Item B)

It was necessary to obtain an analysis of the highest qualification of the respondents, to determine their level of education which could have an influence on health information. This data would give a clear picture of the population under study.

Of the 150 respondents, seventy three (48.7%) passed between standard six and eight; forty three (28.7%) of the respondents have a low literacy level (standard five and below). Only five (3.3%) of the 150 respondents had tertiary education.
The qualifications of the respondents are outlined in figure 4.2.

Figure 4.2

The qualifications of the respondents

\[ n = 150 \]

\[ \begin{align*}
5 & \quad (3.3\%) \\
43 & \quad (28.7\%) \\
73 & \quad (48.7\%)
\end{align*} \]

1 = standard 5 and below  
2 = standard 6 – 8  
3 = standard 9 – 10  
4 = diploma/degree

4.2.3 The marital status of the respondents (Item C)

Item C was included to obtain information about the marital status of the respondents. This data will reveal the type of families the respondents lived in. The role of a husband is discussed in section 2.3.3.1 of this study.

Of the 150 respondents seventy two (48.6%) were unmarried; seventy (47.3%) were married; five (3.4%) were divorced and one (0.7%) was widowed.

The marital status of the respondents is outlined in table 4.1.
Table 4.1

The marital status of the respondents

<table>
<thead>
<tr>
<th>Marital status</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>70</td>
<td>47.3</td>
</tr>
<tr>
<td>Unmarried</td>
<td>72</td>
<td>48.6</td>
</tr>
<tr>
<td>Divorced</td>
<td>5</td>
<td>3.4</td>
</tr>
<tr>
<td>Widowed</td>
<td>1</td>
<td>0.7</td>
</tr>
</tbody>
</table>

\( n = 148 \) 100.0

Missing frequency: 2 (Unanswered)

4.2.4 The type of families the respondents lived in (Item D)

Data collected through item D provided the researcher with information regarding the type of families the respondents live in, that is, nuclear family or extended family, whether she cohabits or lives alone.

The data will develop a clear picture of the population under study. A family may act as a support system for the mother during weaning and a description of this aspect is given in chapter 2 of this study. A mother who lives alone may lack support during weaning.

It was found that, of the 150 respondents, fifty five (36.7%) lived in nuclear families, while fifty one (34%) lived in extended families. **Table 4.2** outlines the type of families the respondents lived in at the time of weaning.
### Table 4.2
The type of families the respondents lived in

<table>
<thead>
<tr>
<th>Type of Family</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nuclear family</td>
<td>55</td>
<td>36.7</td>
</tr>
<tr>
<td>Extended family</td>
<td>51</td>
<td>34.0</td>
</tr>
<tr>
<td>Alone with child</td>
<td>22</td>
<td>14.7</td>
</tr>
<tr>
<td>Co-habited</td>
<td>22</td>
<td>14.7</td>
</tr>
<tr>
<td>( n = )</td>
<td>150</td>
<td>100.0</td>
</tr>
</tbody>
</table>

#### 4.2.5 The occupation of the respondents (Item E)

This item was included in order to enable the researcher to identify the occupations of all the respondents and to provide background information about the respondents.

Occupation influences the duration of breast-feeding. Mothers from higher socio-economic groups and those with a higher level of education tend to breast-feed for shorter periods, compared to those from lower socio-economic groups. Working mothers tend to wean earlier than unemployed mothers. There is a detailed description of this aspect in sections 2.2.3 and 2.3.1, of this study.

Of the one hundred and fifty respondents, thirty eight (25.9%) were domestic workers; thirty four (23.1%) were housewives; thirty eight (25.9%) were unemployed and seventeen (11.6%) were involved in free market (refers to hawkers, vendors). It was found that a small number of respondents were not trained or prepared for specific occupations. Only two (1.4%) of the
respondents were health workers, four (2.7%) had other professions and fourteen (9.5%) did office work.

The occupations of the respondents are outlined in table 4.3.

Table 4.3

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health worker</td>
<td>2</td>
<td>1.4</td>
</tr>
<tr>
<td>Other professions</td>
<td>4</td>
<td>2.7</td>
</tr>
<tr>
<td>Office worker</td>
<td>14</td>
<td>9.5</td>
</tr>
<tr>
<td>Free market (those who sell, e.g. street vendors, hawkers)</td>
<td>17</td>
<td>11.6</td>
</tr>
<tr>
<td>Domestic worker</td>
<td>38</td>
<td>25.9</td>
</tr>
<tr>
<td>Housewife</td>
<td>34</td>
<td>23.1</td>
</tr>
<tr>
<td>Unemployed</td>
<td>38</td>
<td>25.9</td>
</tr>
<tr>
<td><strong>n =</strong></td>
<td><strong>147</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Missing frequency: 3 (Unanswered)

4.2.6 The relationship between occupation and the duration of breast-feeding

Occupation and the level of education of the mother may influence the duration of breast-feeding. Unemployed mothers, those with a lower level of education and those from lower socio-economic groups may breast-feed for longer periods as discussed in chapter two, sections 2.2.3 and 2.3.1, of this study.

Interpretation and discussion of data regarding the relationship between occupation and the duration of breast-feeding is organised according to the
number of children the respondents had, that is first, second, third or fourth child.

- **First child**
  
  Of the 150 respondents, there were 132 responses and eighteen missing frequencies. There were eighteen missing frequencies because not all the 150 mothers breast-fed their first babies or breast-fed them for nine months or longer. This study was only concerned with those children who were breast-fed for nine months or longer.

  It was found that of the 132 respondents, thirty five (26.5%) were domestic workers. The majority of these respondents, that is, twelve (9.09%) of them, breast-fed for nineteen to twenty four months.

  According to table 4.3 it would appear that domestic workers, housewives, the unemployed respondents and those who were involved in free market breast-fed their babies for longer periods compared to health workers, other professionals or office workers.

  The findings of the relationship between occupation and the duration of breast-feeding (first child) are reflected in table 4.4.

- **Second child**
  
  Of the 150 respondents there were eighty four respondents and fifty six missing frequencies. The missing frequencies included mothers who had one child, those who did not breast-feed their second children and those who breast-fed for a short time (less than nine months).
Table 4.4

The relationship between occupation and the duration of breast-feeding: First child (n = 132)

<table>
<thead>
<tr>
<th>Occupation of respondents</th>
<th>Duration of breast-feeding (in months)</th>
<th>09-12</th>
<th>13-15</th>
<th>16-18</th>
<th>19-24</th>
<th>25-36</th>
<th>&gt; 36</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health worker</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>1,52%</td>
<td>0%</td>
<td>1,52%</td>
</tr>
<tr>
<td>Other professions</td>
<td></td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0%</td>
<td>1,52%</td>
<td>0%</td>
<td>0,76%</td>
<td>0%</td>
<td>0%</td>
<td>2,27%</td>
</tr>
<tr>
<td>Office worker</td>
<td>4</td>
<td>3,03%</td>
<td>1</td>
<td>2,27%</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0,76%</td>
<td>0,76%</td>
<td>2,27%</td>
<td>2,27%</td>
<td>0,76%</td>
<td>0%</td>
<td>2,27%</td>
</tr>
<tr>
<td>Free market</td>
<td>1</td>
<td>0,76%</td>
<td>1,52%</td>
<td>2,27%</td>
<td>1,52%</td>
<td>2,27%</td>
<td>2,27%</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0,76%</td>
<td>1,52%</td>
<td>2,27%</td>
<td>1,52%</td>
<td>2,27%</td>
<td>2,27%</td>
<td>10,61%</td>
</tr>
<tr>
<td>Domestic worker</td>
<td>8</td>
<td>6,06%</td>
<td>3</td>
<td>2,27%</td>
<td>5,30%</td>
<td>9,09%</td>
<td>2,27%</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6,06%</td>
<td>3,03%</td>
<td>6,06%</td>
<td>5,30%</td>
<td>1,52%</td>
<td>1,52%</td>
<td>26,52%</td>
</tr>
<tr>
<td>Housewife</td>
<td>8</td>
<td>6,06%</td>
<td>3</td>
<td>6,06%</td>
<td>5,30%</td>
<td>1,52%</td>
<td>1,52%</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6,06%</td>
<td>3,03%</td>
<td>6,06%</td>
<td>5,30%</td>
<td>1,52%</td>
<td>1,52%</td>
<td>23,48%</td>
</tr>
<tr>
<td>Unemployed</td>
<td>8</td>
<td>6,06%</td>
<td>3</td>
<td>3,79%</td>
<td>5,30%</td>
<td>9,09%</td>
<td>4,55%</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6,06%</td>
<td>3,03%</td>
<td>3,79%</td>
<td>5,30%</td>
<td>9,09%</td>
<td>4,55%</td>
<td>26,52%</td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
<td>21,97%</td>
<td>16</td>
<td>19,70%</td>
<td>28,03%</td>
<td>12,88%</td>
<td>5,30%</td>
<td>132</td>
</tr>
</tbody>
</table>

Frequency missing: 18

It was found that of the eighty four respondents who breast-fed their babies for nine months or longer, fourteen (16,7%) were involved in free market; twenty two (26,2%) were domestic workers; nineteen (22,6%) were housewives and nineteen (22,6%) were unemployed. Of the remaining respondents, one (1,96%) was a health worker; two (2,1%) belonged to other professions, while seven (8,3%) were office workers. According to table 4.5 the majority of the respondents, twenty seven (32,1%) weaned their babies between the ages nineteen and twenty four months.
Table 4.5 reflects the findings of the relationship between occupation and the duration of breast-feeding: second child.

### Table 4.5

The relationship between occupation and the duration of breast-feeding:

**Second child** (n = 84)

<table>
<thead>
<tr>
<th>Occupation of respondents</th>
<th>Duration of breast-feeding (in months)</th>
<th>09-12</th>
<th>13-15</th>
<th>16-18</th>
<th>19-24</th>
<th>25-36</th>
<th>&gt; 36</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health worker</td>
<td></td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>1%</td>
<td>0%</td>
<td>1,19%</td>
</tr>
<tr>
<td>Other professions</td>
<td></td>
<td>0%</td>
<td>1,19%</td>
<td>0%</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
<td>2,38%</td>
</tr>
<tr>
<td>Office worker</td>
<td></td>
<td>2,38%</td>
<td>2,38%</td>
<td>0%</td>
<td>2,38%</td>
<td>1,19%</td>
<td>0%</td>
<td>8,33%</td>
</tr>
<tr>
<td>Free market</td>
<td></td>
<td>3,57%</td>
<td>0%</td>
<td>1,19%</td>
<td>5%</td>
<td>5%</td>
<td>0%</td>
<td>16,66%</td>
</tr>
<tr>
<td>Domestic worker</td>
<td></td>
<td>9,52%</td>
<td>1,19%</td>
<td>1,19%</td>
<td>3%</td>
<td>2,38%</td>
<td>4,76%</td>
<td>22,19%</td>
</tr>
<tr>
<td>Housewife</td>
<td></td>
<td>5,95%</td>
<td>0%</td>
<td>0%</td>
<td>2%</td>
<td>8,33%</td>
<td>2,38%</td>
<td>3,57%</td>
</tr>
<tr>
<td>Unemployed</td>
<td></td>
<td>7,14%</td>
<td>0%</td>
<td>8,33%</td>
<td>5%</td>
<td>0%</td>
<td>1,19%</td>
<td>22,61%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>28,57%</td>
<td>3,76%</td>
<td>14,28%</td>
<td>32,14%</td>
<td>15,47%</td>
<td>4,76%</td>
<td>100,0%</td>
</tr>
</tbody>
</table>

Frequency missing: 56

- **Third child**

Of the 150 respondents there were forty one respondents and 109 missing frequencies. The missing frequencies comprised of mothers who had less than three children, those who did not breast-feed the third child and those who breast-fed this child for a short period (less than nine months).
Of the forty one respondents, seven (17.1%) were involved in free market; seven (17.1%) were domestic workers; thirteen (31.7%) were housewives and nine (21.95%) were unemployed. The remaining respondents were either health workers, belonged to other professions or were office workers. Table 4.6 indicates that housewives and unemployed mothers breast-fed their babies longer than employed mothers.

According to table 4.6, fourteen (34.14%) of the respondents weaned their babies between nineteen and twenty four months of age.

Table 4.6 outlines the findings of the relationship between occupation and the duration of breast-feeding: third child.

- *Fourth child*

Of the 150 respondents, there were only fifteen respondents and 135 missing frequencies. The missing frequencies included mothers who had less than four children, those who did not breast-feed the fourth child and those who breast-fed this child for a short period (less than nine months).

Of the fifteen respondents, six (40%) were housewives; four (26.67%) were unemployed and two (13.33%) were domestic workers. There were no health workers in this group of fifteen respondents. There was one (6.67%) respondent who belonged to other professions, one (6.67%) office worker and one (6.67%) respondent who was involved in free market.
Table 4.6
The relationship between occupation and the duration of breast-feeding:
Third child \((n = 41)\)

<table>
<thead>
<tr>
<th>Occupation of respondents</th>
<th>Duration of breast-feeding (in months)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health worker</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Other professions</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td>Office worker</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>Free market</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>Domestic worker</td>
<td>3%</td>
<td>1%</td>
</tr>
<tr>
<td>Housewife</td>
<td>3%</td>
<td>0%</td>
</tr>
<tr>
<td>Unemployed</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td>10%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Frequency missing: 109

The results in table 4.7 indicate that housewives and the unemployed mothers breast-fed their babies longer than employed mothers did.

The findings are reflected in table 4.7.
Table 4.7
The relationship between occupation and the duration of breast-feeding:
Fourth child \((n = 15)\)

<table>
<thead>
<tr>
<th>Occupation of respondents</th>
<th>Duration of breast-feeding (in months)</th>
<th>09–12</th>
<th>13–15</th>
<th>16–18</th>
<th>19–24</th>
<th>25–36</th>
<th>&gt; 36</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health worker</td>
<td></td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Other professions</td>
<td></td>
<td>6.67%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>1</td>
</tr>
<tr>
<td>Office worker</td>
<td></td>
<td>6.67%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>1</td>
</tr>
<tr>
<td>Free market</td>
<td></td>
<td>6.67%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>1</td>
</tr>
<tr>
<td>Domestic worker</td>
<td></td>
<td>6.67%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>1</td>
<td>0%</td>
<td>2</td>
</tr>
<tr>
<td>Housewife</td>
<td></td>
<td>0%</td>
<td>0%</td>
<td>3</td>
<td>3</td>
<td>0%</td>
<td>6</td>
<td>40%</td>
</tr>
<tr>
<td>Unemployed</td>
<td></td>
<td>6.67%</td>
<td>0%</td>
<td>6.67%</td>
<td>0%</td>
<td>6.67%</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>33.33%</td>
<td>0%</td>
<td>6.67%</td>
<td>20%</td>
<td>33.33%</td>
<td>6.67%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Frequency missing: 135

4.3 HEALTH EDUCATION OF THE RESPONDENTS (ITEM F)

The researcher included item F to determine if the respondents previously received any health education on weaning.

The findings revealed that of the 150 respondents, 121 (81.2%) stated that they did not receive any health education on weaning. Only twenty eight
(18.8%) of the respondents indicated that they received health education on weaning.

Figure 4.3 reflects whether the respondents received any health education on weaning.

**Figure 4.3**

Health education of respondents

<table>
<thead>
<tr>
<th>Received health education</th>
<th>Did not receive education</th>
</tr>
</thead>
<tbody>
<tr>
<td>28</td>
<td>121</td>
</tr>
<tr>
<td>18.8%</td>
<td>81.2%</td>
</tr>
</tbody>
</table>

4.4 THE INDIVIDUALS WHO GAVE HEALTH EDUCATION TO THE RESPONDENTS (ITEM G)

Item G had to be completed by the respondents who had indicated that they were given health education in item F. The aim of including this section was to identify the individuals who provided health education and information to the respondents on weaning. Item G would also indicate if health workers teach mothers about weaning.
According to figure 4.3 only twenty eight (18.8%) of the respondents indicated that they were given health education on weaning. Table 4.8 indicates that of these twenty eight (18.8%) respondents mentioned in figure 4.3, twelve (43%) stated that they were taught or instructed by their relatives. Ten (35.7%) respondents stated that they received their health education from health workers, at antenatal, postnatal, and baby clinics. Four (14%) of the respondents were taught by their friends and two (7%) by their neighbours.

The findings are reflected in table 4.8.

Table 4.8

Individuals who gave health education on weaning to the respondents \( (n = 28) \)

<table>
<thead>
<tr>
<th>Who educated the mothers</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health worker at antenatal clinic</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Health worker at post-natal clinic</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Health worker at baby clinic</td>
<td>6</td>
<td>21</td>
</tr>
<tr>
<td>Relatives</td>
<td>12</td>
<td>43</td>
</tr>
<tr>
<td>Friends</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>Neighbours</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Health workers at the baby clinic and health worker at antenatal clinic</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Health worker at the baby clinic and relatives</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

\( n = 28 \)
4.5 PROBLEMS EXPERIENCED DURING WEANING (ITEM H)

Item H was included to determine if respondents experienced problems during weaning. The duration of breast-feeding was included to ensure that only children who were breast-fed for nine months or longer were included in the study. The data is presented according to the number of children, from the first to the fourth child.

4.5.1 Duration of breast-feeding and the number of respondents who experience problems when weaning the FIRST child

It was found that 134 respondents breast-fed their babies for longer than nine months. The missing frequency was sixteen and it consisted of those respondents who did not breast-feed their first babies.

It was found that ninety two (68.66%) of the respondents did not experience problems during weaning, while forty two (31.34%) encountered problems during weaning. The most frequent duration of breast-feeding was nineteen to twenty four months. Only seven (5.22%) respondents weaned after thirty six months and only one of them encountered problems during weaning.

Table 4.9 outlines the duration of breast-feeding and the number of mothers or respondents who experienced problems during weaning the first child.
Table 4.9
Duration of breast-feeding and the number of respondents who experienced problems when weaning the FIRST child (n = 134)

<table>
<thead>
<tr>
<th>Duration of breast-feeding</th>
<th>Experienced problems</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>9 - 12 months</td>
<td>12 8,96%</td>
<td>18 13,43%</td>
</tr>
<tr>
<td>13 - 15 months</td>
<td>8 5,97%</td>
<td>8 5,97%</td>
</tr>
<tr>
<td>16 - 18 months</td>
<td>9 6,72%</td>
<td>17 12,69%</td>
</tr>
<tr>
<td>19 - 24 months</td>
<td>8 5,97%</td>
<td>29 21,64%</td>
</tr>
<tr>
<td>25 - 36 months</td>
<td>4 2,99%</td>
<td>14 4,48%</td>
</tr>
<tr>
<td>&gt; 36 months</td>
<td>1 0,75%</td>
<td>6 4,48%</td>
</tr>
<tr>
<td>Total</td>
<td>42 31,34%</td>
<td>92 68,66%</td>
</tr>
</tbody>
</table>

4.5.2 Duration of breast-feeding and the number of respondents who experienced problems when weaning the SECOND child

Out of the 150 respondents, eighty four breast-fed their babies for nine months and longer, while the missing frequency was sixty six respondents. The missing frequency consisted of those respondents who did not breast-feed the second child.

According to table 4.10 of these eighty four respondents, thirty one (36,9%) experienced problems while fifty three (63,09%) of them did not encounter any
problems. The most frequent age for weaning was found to be nineteen to twenty-four months.

The findings about the duration of breast-feeding and the number of respondents who experienced problems (second child), are reflected in Table 4.10.

### Table 4.10

Duration of breast-feeding and the number of respondents who experienced problems when weaning the SECOND child \((n = 84)\)

<table>
<thead>
<tr>
<th>Duration of breast-feeding</th>
<th>Experienced problems</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>9 – 12 months</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>10.7%</td>
<td>7.8%</td>
</tr>
<tr>
<td>13 – 15 months</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>1.9%</td>
<td>3.57%</td>
</tr>
<tr>
<td>16 – 18 months</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>4.76%</td>
<td>9.58%</td>
</tr>
<tr>
<td>19 – 24 months</td>
<td>11</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>13.04%</td>
<td>19.04%</td>
</tr>
<tr>
<td>25 – 36 months</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>7.14%</td>
<td>8.33%</td>
</tr>
<tr>
<td>&gt; 36 months</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>0%</td>
<td>4.76%</td>
</tr>
<tr>
<td>Total</td>
<td>31</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>36.90%</td>
<td>63.09%</td>
</tr>
</tbody>
</table>
4.5.3 The duration of breast-feeding and the number of respondents who experienced problems when weaning the THIRD child

In this category there were forty one respondents who breast-fed their babies for nine months and over. Of the forty one respondents, thirteen (31,70%) had problems, while twenty eight (68,29%) did not have problems during weaning. Nine to twelve months was found to be the most frequent age for weaning in this category.

Table 4.11 reflects the findings about the duration of breast-feeding and the number of respondents who experienced problems when weaning the third child.

4.5.4 Duration of breast-feeding and number of respondents who experienced problems when weaning the FOURTH child

Of the 150 respondents, there were fifteen respondents who breast-fed their babies for nine months or longer, and 135 missing frequencies. The missing frequencies consisted of mothers who had less than four children.

Only fifteen or the respondents had a fourth child whom they breast-fed for nine months or longer. Of the fifteen respondents eight (53,33%) experienced problems while seven (46,67%) did not experience problems during weaning.

Table 4.12 reflects the findings about the duration of breast-feeding and the number of respondents who experienced problems when weaning the fourth child.
Table 4.11
Duration of breast-feeding and the number of respondents who experienced problems when weaning the THIRD child (n = 41)

<table>
<thead>
<tr>
<th>Duration of breast-feeding</th>
<th>Experienced problems</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>9 - 12 months</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>9.75%</td>
<td>14.63%</td>
</tr>
<tr>
<td>13 - 15 months</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>0%</td>
<td>4.87%</td>
</tr>
<tr>
<td>16 - 18 months</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>7.31%</td>
<td>4.43%</td>
</tr>
<tr>
<td>19 - 24 months</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>7.31%</td>
<td>26.82%</td>
</tr>
<tr>
<td>25 - 36 months</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>2.43%</td>
<td>12.19%</td>
</tr>
<tr>
<td>&gt; 36 months</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>2.87%</td>
<td>7.31%</td>
</tr>
<tr>
<td>Total</td>
<td>13</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>31.70%</td>
<td>65.12%</td>
</tr>
</tbody>
</table>

4.6 THE CHILDREN WITH WHOM THE RESPONDENTS EXPERIENCED THE MOST PROBLEMS DURING WEANING (ITEM 1)

Item I was included to identify the child who gave each respondent the most problems during weaning. It was found that most of the respondents, eighty (54%), did not experience problems when weaning any of their children. Forty (27%) of the respondents experienced problems with their first babies, and the problems seemed to decrease with subsequent children.
**Table 4.12**

Duration of breast-feeding and the number of respondents who experienced problems when weaning the FOURTH child (n = 15)

<table>
<thead>
<tr>
<th>Duration of breast-feeding</th>
<th>Experienced problems</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>.9 - 12 months</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>13 - 15 months</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>16 - 18 months</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>19 - 24 months</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>25 - 36 months</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>&gt; 36 months</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>7</td>
</tr>
</tbody>
</table>

**Table 4.13** outlines the findings about the child with whom each respondent experienced most problems.

**Table 4.13**

Children with whom the respondents experienced most problems (n = 148)

<table>
<thead>
<tr>
<th>Child</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>First child</td>
<td>40</td>
<td>27,0</td>
</tr>
<tr>
<td>Second child</td>
<td>22</td>
<td>14,9</td>
</tr>
<tr>
<td>Third child</td>
<td>4</td>
<td>2,7</td>
</tr>
<tr>
<td>Fourth child</td>
<td>2</td>
<td>1,4</td>
</tr>
<tr>
<td>No problems with children</td>
<td>80</td>
<td>54,0</td>
</tr>
<tr>
<td>n</td>
<td>148</td>
<td>100,0</td>
</tr>
</tbody>
</table>
4.7 THE RESPONDENTS' REASONS FOR WEANING (ITEM J)

Item J was included to find out the respondents' reasons for weaning. A respondent could give more than one reason for weaning. The majority of the respondents, fifty four (36%), weaned because they thought their babies were old enough to be weaned.

Thirty five (23%) of the respondents weaned because they were starting work. Maternal employment is described in section 2.3.1 of this study, as one of the main reasons for weaning. Forty seven (31%) of the respondents, weaned because their babies started biting their breasts.

The reasons for weaning are outlined in table 4.14.

Table 4.14
Reasons for weaning ($n = 150$)

<table>
<thead>
<tr>
<th>Reason</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starting work</td>
<td>35</td>
<td>23</td>
</tr>
<tr>
<td>Pregnancy</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>Felt pressurised by others to stop breast-feeding</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Thought the baby was old enough to be weaned</td>
<td>54</td>
<td>36</td>
</tr>
<tr>
<td>The mother was sick</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>Mother did not have enough milk</td>
<td>19</td>
<td>13</td>
</tr>
<tr>
<td>Baby refused to drink</td>
<td>16</td>
<td>11</td>
</tr>
<tr>
<td>Baby was sick</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Baby started biting mother's breasts</td>
<td>47</td>
<td>31</td>
</tr>
</tbody>
</table>

(The mothers were allowed to give more than one reason for weaning. The total figures were therefore not calculated.)
BABY FEEDING METHODS USED BY THE RESPONDENTS AT THE TIME OF WEANING (ITEM K)

Data collected through item K provided the researcher with information about methods of child feeding at the time of weaning. This information reveals some of the weaning practices used by the respondents.

It was found that most of the respondents, 125 (84%) gave their babies solids at the time of weaning. Table 4.15 outlines the feeding methods.

Table 4.15
Child feeding methods and diet during weaning

<table>
<thead>
<tr>
<th>Feeding / Drinking Method</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bottle</td>
<td>13</td>
<td>9</td>
</tr>
<tr>
<td>Cup</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Cup and bottle</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Solids, family diet</td>
<td>125</td>
<td>84</td>
</tr>
<tr>
<td>Cup, bottle, solids and family diet</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

n = 148 100

Missing frequency: 2 (unanswered)

THE FEELINGS OF THE RESPONDENTS ABOUT WEANING (ITEM L)

Item L focuses on the respondents' attitudes to breast-feeding. This section is divided into four statements as indicated in table 4.16. The majority, 118 (78.7%) of the respondents strongly agreed that breast-feeding was a fulfilling
experience for them, breast-feeding comforted their babies, they felt close to their babies when breast-feeding and the respondents also stated that their babies seemed to enjoy the breast-feeds.

Kibel and Wagstaff (1995: 87) states that a mother may experience breast-feeding as very pleasurable and rewarding or she may perceive it as primitive and repulsive. The respondents' attitude to breast-feeding is generally positive. Table 4.16 outlines the attitudes of the respondents to breast-feeding.

Table 4.16
The feelings of the respondents about breast-feeding ($n = 150$)

1 = strongly disagree; 2 = disagree; 3 = uncertain; 4 = agree; 5 = strongly agree

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Breast-feeding was a fulfilling experience for the mother</td>
<td>2</td>
<td>0</td>
<td>1,3%</td>
<td>0%</td>
<td>1,3%</td>
</tr>
<tr>
<td>2. Breast-feeding comforted the baby</td>
<td>2</td>
<td>1</td>
<td>6</td>
<td>29</td>
<td>112</td>
</tr>
<tr>
<td>3. The mother felt close to her baby when breast-feeding</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>24</td>
<td>125</td>
</tr>
<tr>
<td>4. The baby seemed to be enjoying the breast-feeds</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>24</td>
<td>125</td>
</tr>
</tbody>
</table>

1 = strongly disagree; 2 = disagree; 3 = uncertain; 4 = agree; 5 = strongly agree
4.10 THE DURATION OF THE WEANING PROCESS (ITEM M)

Item M provides information regarding the duration of the weaning process, to reveal whether the weaning process was abrupt or long–term.

Seventy one (48.3%) of the respondents took several days to wean their babies off the breast. Forty three (29.3%) of the respondents weaned their babies over several weeks, which is regarded as the gradual method of weaning. This method of weaning is described in section 2.3.2.1 of this study.

Thirty three (22.4%) of the respondents took one day to wean their babies off the breast which is an abrupt method of weaning and a detailed description of this method is in section 2.3.2.2 of this study.

Table 4.17
The duration of weaning babies from breast-feeding (n = 150)

<table>
<thead>
<tr>
<th>Duration</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>One day</td>
<td>33</td>
<td>22.4</td>
</tr>
<tr>
<td>Several days</td>
<td>71</td>
<td>48.3</td>
</tr>
<tr>
<td>Several weeks</td>
<td>43</td>
<td>29.3</td>
</tr>
<tr>
<td>(n = )</td>
<td>147</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Missing frequency: 3 (unanswered)
4.11 WEANING PRACTICES OF THE RESPONDENTS (ITEM N)

This item was included to reveal the weaning practices used by the respondents. A respondent could give more than one answer. Fifty six (37.5%) left their children with friends or relatives during weaning. Thirty five (23.5%) of the respondents applied distasteful substances on their breasts to discourage their children from sucking from the breast. Twenty six (17%) of the respondents weaned their babies over several weeks in which breast-feeds were slowly replaced by other means of feeding. However, forty three (29.3%) respondents indicated (in section 4.10) that they weaned their babies over several weeks. Thirteen (9%) of the respondents took medication to dry their milk, while nineteen (13%) bound their breasts during weaning.

The practices of weaning are outlined in table 4.18.

Table 4.18

Weaning practices used by the respondents (n = 150)

<table>
<thead>
<tr>
<th>Method of Weaning</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Bound breasts</td>
<td>19</td>
<td>13.0</td>
</tr>
<tr>
<td>2. The mother took medication to dry milk</td>
<td>13</td>
<td>9.0</td>
</tr>
<tr>
<td>3. The mother applied distasteful substances to the breast</td>
<td>35</td>
<td>23.5</td>
</tr>
<tr>
<td>4. The weaning lasted several weeks in which the breast-feeds were slowly replaced by other means of feeding</td>
<td>26</td>
<td>17.0</td>
</tr>
<tr>
<td>5. The mother left the child with a friend or relative</td>
<td>56</td>
<td>37.5</td>
</tr>
</tbody>
</table>

Missing frequency: 1 (unanswered)
4.12 THE TYPE OF PROBLEMS EXPERIENCED BY RESPONDENTS AND THEIR BABIES DURING WEANING (ITEM O)

Data collected through item O provided information about the types of problems experienced by the respondents and their babies, and the extent to which they experienced the problems. Section O of the questionnaire had a scale of "never", "sometimes", "often" or "always", in which the mothers had to indicate their responses.

The findings are outlined in table 4.19.

Item O is further subdivided into eleven subsections, according to which the findings are presented and are as follows:

4.12.1 Guilt feelings experienced by mothers

It was found that thirty eight (25.3%) of the respondents never experienced guilt feelings during weaning. Fifty (33.3%) of the respondents always felt guilty while eight (5.3%) of the respondents often felt guilty. Fifty four (36%) of the respondents sometimes felt guilty when weaning.

4.12.2 Respondent felt a need for support during weaning

Half of the respondents, seventy five (50.3%) never needed support during weaning while the other half needed support in varying degrees. Of the latter half twenty eight (18.8%) sometimes needed support, eighteen (12.1%) often needed support, while twenty eight (18.8%) always needed support during weaning.
Table 4.19
Problems during weaning (n = 150)

<table>
<thead>
<tr>
<th>Problem</th>
<th>Never</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guilt feelings when weaning</td>
<td>38 (n)</td>
<td>54 (n)</td>
<td>8 (n)</td>
<td>50 (n)</td>
</tr>
<tr>
<td></td>
<td>25.3</td>
<td>36</td>
<td>5.3</td>
<td>33.3</td>
</tr>
<tr>
<td>Need for support during weaning</td>
<td>75 (n)</td>
<td>28</td>
<td>18</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>50.3</td>
<td>18.8</td>
<td>12.1</td>
<td>18.8</td>
</tr>
<tr>
<td>Not knowing how to comfort the baby anymore</td>
<td>62 (n)</td>
<td>43</td>
<td>20</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>41.3</td>
<td>28.7</td>
<td>13.3</td>
<td>16.7</td>
</tr>
<tr>
<td>Difficult to let go of the baby</td>
<td>57 (n)</td>
<td>27</td>
<td>16</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>58.3</td>
<td>18.1</td>
<td>10.7</td>
<td>32.9</td>
</tr>
<tr>
<td>Felt unhappy</td>
<td>48 (n)</td>
<td>43</td>
<td>14</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>32.4</td>
<td>29.1</td>
<td>9.5</td>
<td>29.1</td>
</tr>
<tr>
<td>The respondent worried that her baby would not love her anymore</td>
<td>56 (n)</td>
<td>40</td>
<td>9</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>37.8</td>
<td>27</td>
<td>6.1</td>
<td>29.1</td>
</tr>
<tr>
<td>Baby cried endlessly</td>
<td>63 (n)</td>
<td>47</td>
<td>11</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>43.8</td>
<td>32.6</td>
<td>7.6</td>
<td>16</td>
</tr>
<tr>
<td>Sleep problems</td>
<td>54 (n)</td>
<td>58</td>
<td>8</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>36.2</td>
<td>38.9</td>
<td>5.4</td>
<td>19.5</td>
</tr>
<tr>
<td>Baby started throwing tantrums</td>
<td>65 (n)</td>
<td>45</td>
<td>11</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>44.2</td>
<td>30.6</td>
<td>7.5</td>
<td>17.7</td>
</tr>
<tr>
<td>Baby looked unhappy</td>
<td>62 (n)</td>
<td>49</td>
<td>16</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>41.9</td>
<td>33.1</td>
<td>10.8</td>
<td>14.2</td>
</tr>
<tr>
<td>Baby started bedwetting/wetting himself/herself</td>
<td>73 (n)</td>
<td>53</td>
<td>9</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>49</td>
<td>35.6</td>
<td>6</td>
<td>9.4</td>
</tr>
</tbody>
</table>

Missing frequency: column 2 = 1; column 4 = 1; column 5 = 2; column 6 = 2; column 7 = 6; column 8 = 1; column 9 = 3; column 10 = 2 and column 11 = 1

Ntombela (1994: 20) encourages formation of support groups to perform this function, since traditional support is dwindling.
4.12.3 Respondents did not know how to comfort their babies any more

Sixty two (41.3%) of the respondents stated that they did not experience problems when comforting their babies during weaning. Forty three (28.7%) sometimes, twenty (13.3%) often and twenty five (16.7%) always experienced problems when comforting their babies.

4.12.4 Difficulty in letting go of the baby

One of the psychological advantages of breast-feeding is the closeness between the mother and baby during breast-feeding. However as the baby grows and becomes more independent, the mother has to stop breast-feeding. A mother may wish to preserve this closeness and find it difficult to let go of her baby (Bottorff 1990: 208).

Fifty seven (38.3%) of the respondents did not find it difficult to let go of their babies. The majority of the respondents experienced this problem in varying degrees, that is, twenty seven (18.1%) sometimes, sixteen (10.7%) often and forty nine (32.9%) always experienced difficulty in letting go of the baby.

4.12.5 Respondents felt unhappy when weaning

It was found that feelings of unhappiness were present in 102 (67.6%) of the respondents. Forty three (29.1%) sometimes, fourteen (9.5%) often, while forty three (29.1%) always felt unhappy when weaning. Forty eight (32.4%) did not feel unhappy when weaning.
The respondents were worried that their babies would not love them anymore

Fifty six (37.8%) of the respondents reported that they did not worry about their babies not loving them anymore, while the remaining ninety two (62.2%) of them worried in varying degrees. Forty (27%) sometimes, nine (6.1%) often and forty three (29.9%) always worried about their babies not loving them anymore.

The babies cried endlessly for the breast

Sixty three (43.8%) of the respondents did not encounter this problem while eighty one (56.2%) of them experienced the problem in varying degrees. Forty seven (32.6%) sometimes, eleven (7.6%) often and twenty three (16%) always experienced this problem.

Sleep disturbances

Most of the respondents, ninety five (63.8%), experienced sleep disturbances, while fifty four (36.2%) of the respondents did not experience the problem.

Of the ninety five (63.8%) respondents, fifty eight (38.9%) sometimes, eight (5.4%) often and twenty nine (19.5%) always experienced sleep disturbances. Missing frequency: one (unanswered)

Temper tantrums at the time of weaning

Of the 150 respondents, sixty five (44.2%) stated that their babies did not throw temper tantrums. Of the remaining respondents, forty five (30.6%)
sometimes, eleven (7,5%) often and twenty six (17,7%) always experienced the problem.
Missing frequency: three (unanswered)

Temper tantrums occur in toddlers if they cannot have their own way, for example in this case, breast-feeds. The causes of temper tantrums such as fatigue, hunger and insecurity should be prevented. Insecurity can be prevented by giving the child more love and attention (Hancock 1992: 272).

4.12.10 The baby looked unhappy at the time of weaning

Only sixty two (41,9%) of the respondents reported that their babies never looked unhappy. Eighty eight (58,8%) of the respondents stated that their babies looked unhappy during weaning. Of the latter group forty nine (33,1%) sometimes, sixteen (10,8%) often and twenty one (14,2%) always experienced the problem.
Missing frequency: two (unanswered)

4.12.11 The baby started bed-wetting/wetting himself/herself during weaning

Bed-wetting may regarded a problem in an older child, who was already "potty" trained.

It was found that seventy three (49%) of the respondents did not experience this problem while the remaining seventy seven (51%) respondents encountered this problem in varying degrees. Of the latter group fifty three (35,6%) sometimes, nine (6%) often and fourteen (9,4%) always experienced the problem.
THE RESPONDENTS' VIEWS ABOUT CERTAIN ASPECTS OF WEANING (ITEM P)

Item P consists of five subsections which are presented individually. Table 4.20 outlines the findings of the subsections.

4.13.1 Health education of mothers about weaning (Item P, section 1)

This section was included to find out from the respondents if there was a need for health education of mothers on weaning.

It was found that eighty two (54.7%) of the respondents strongly agreed and thirty five (23.3%) of them agreed that there was a need for health education of mothers on weaning. Nine (6%) of the respondents were uncertain if there was a need for health education on weaning and the remaining twenty four (16%) either disagreed or strongly disagreed.

4.13.2 Mothers need support and guidance from community health nurses during weaning (Item P, section 2)

The data collected through this item provided information regarding the respondents' opinions about mother's need for support, counselling and guidance from community health nurses during weaning.

Table 20 reflects that seventy four (49.3%) of the respondents strongly agreed and fifty (33.3%) of them agreed that there was a need for mothers to have support, counselling and guidance from health workers during weaning. A small number, seventeen (11.3%), of respondents either strongly disagreed or
disagreed with the above-mentioned statement.

4.13.3 **The child should be on a family diet before breast-feeding is stopped (Item P, section 3)**

Data collected through this item provided information regarding the views of respondents about some of the recommended methods of weaning which are discussed in chapter 2. This item reveals the respondents' knowledge about weaning.

It was found that seventy six (50.7%) of the respondents strongly agreed and thirty eight (25.3%) of them agreed that a child should be on a family diet before weaning. Fourteen (9.3%) of the respondents were uncertain and the remaining respondents either strongly disagreed or agreed with the statement.

4.13.4 **If the child understands, the mother should explain to the child why breast-feeding should stop (Item P, section 4)**

Data collected through this item reveals the respondents' opinions and knowledge about weaning.

Sixty eight (45.3%) of the respondents strongly agreed. Thirty nine (26%) of them agreed that if a child understands, the mother should explain to the child why breast-feeding has to be stopped. Twenty two (14.7%) of the respondents were uncertain about this statement. A small number, twenty one (14%), either strongly disagreed or agreed.
4.13.5 The child should be given more love and attention during weaning (Item P, section 5)

Data collected through this item revealed the respondents' opinions and knowledge about weaning.

The majority, 110 (73,3%) of the respondents, strongly agreed that a child should be given more love and attention during weaning, while thirty one (20,7%) of them agreed with the above statement. A small number, five (3,4%) of the respondents, either disagreed or strongly disagreed with the above-mentioned statement. Four (2,7%) of the respondents were uncertain.

<table>
<thead>
<tr>
<th>The following statements</th>
<th>Strongly disagree 1</th>
<th>Disagree 2</th>
<th>Uncertain 3</th>
<th>Agree 4</th>
<th>Strongly agree 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community health nurses should teach mothers about weaning</td>
<td>14 (n) 9,3%</td>
<td>10 (n) 6,7%</td>
<td>9 (n) 6,0%</td>
<td>35 (n) 23,3%</td>
<td>82 (n) 54,7%</td>
</tr>
<tr>
<td>Mothers need support, counselling and guidance from community health nurses during weaning</td>
<td>6 4,0%</td>
<td>11 7,3%</td>
<td>9 6,0%</td>
<td>50 33,3%</td>
<td>74</td>
</tr>
<tr>
<td>The child should be on a family diet before breast feeding is stopped</td>
<td>8 5,3%</td>
<td>14 9,3%</td>
<td>14 9,3%</td>
<td>38 25,3%</td>
<td>76</td>
</tr>
<tr>
<td>If a child understands, the mother should explain to the child why breast-feeding has to stop</td>
<td>8 5,3%</td>
<td>13 8,7%</td>
<td>22 14,7%</td>
<td>39 26%</td>
<td>68</td>
</tr>
<tr>
<td>The child should be given more love and attention during weaning</td>
<td>4 2,7%</td>
<td>1 0,7%</td>
<td>4 2,7%</td>
<td>31 20,7%</td>
<td>110 73,3%</td>
</tr>
</tbody>
</table>
SUMMARY OF FINDINGS AND CONCLUSION

* The majority of the respondents reported that they did not receive health education on weaning. Only twenty eight (18.8%) of the respondents reported that they had received health education on weaning. Most of the information was provided by relatives and friends, and only a small proportion of it was provided by community health nurses.

* It was found that the majority of the respondents experienced problems in varying degrees during weaning. The problems included guilt feelings in the respondent, difficulty in comforting the child during weaning, difficulty in letting go of the baby, unhappiness in the mother, the respondents worried that their babies would not love them anymore, babies cried endlessly for the breast-feeds, disturbances in sleep patterns, throwing of tantrums by the baby, unhappiness in the baby and bed-wetting or wetting himself or herself.

* The methods of weaning were as follows:

- The majority of the respondents ensured that their babies were on solids or family diet before weaning them off the breast.

- Thirty three (22.4%) of the respondents took one day to wean their babies off the breast, which is an abrupt method of weaning. Forty three (43%) took several weeks to wean their babies off the breast, which is the long term method of weaning. Seventy one (48.3%) of the respondents took several days to wean.
It was found that harsh methods of weaning were used by some of the respondents, for example, fifty six (37.5%) of the respondents left their children with friends or relatives during weaning, which is an abrupt and harsh method of weaning. Thirty five (23%) of the respondents applied distasteful substances to their breasts to discourage the baby from sucking. According to the literature search application of distasteful substances on the breast is regarded as a harsh method of weaning.

* The majority of the respondents reported that there was a need for counselling, health education and guidance of mothers during weaning.
CHAPTER 5

DISCUSSION OF FINDINGS, CONCLUSIONS, RECOMMENDATIONS AND LIMITATIONS OF THE STUDY

5.1 INTRODUCTION

In this chapter the findings, conclusions, recommendations and limitations of the study are discussed.

Complaints about weaning problems experienced by mothers who breast-fed their babies for prolonged periods motivated the researcher to initiate this study.

The objectives of this study were to determine

- if mothers experience problems when weaning their babies, after prolonged breast-feeding;

- the type of problems experienced by mothers during weaning, for example, a mother may experience guilt feelings when her baby cries for the breast during weaning;

- the mothers’ weaning practices;

- if mothers need to receive guidance, support and counselling during weaning;
This chapter contains:

- limitations;
- discussion of findings and evaluation of results;
- conclusions of the study; and
- summary of recommendations.

5.2 LIMITATIONS

As a result of conducting this research the following limitations were noted:

- The findings only include weaning practices and some problems encountered by selected breast-feeding mothers.

- The organisation of the questionnaire was a minor limitation as it was not arranged in the sequence of the objectives.

- Health education was prominently placed although investigation weaning practices and problems were main objectives.

- The study included only mothers who attended the antenatal and postnatal clinics at Coronation hospital, therefore generalisations cannot be made on the findings.
5.3 DISCUSSION OF FINDINGS AND EVALUATION OF RESULTS

From analysis and interpretation of data collected by means of questionnaires and interviews, the following facts were identified.

5.3.1 Personal data of the respondents

A. The age of the respondents

The respondents who participated in this research were 150 women who were within the child-bearing age, and most of them were between the ages twenty and twenty nine.

B. The highest qualification

It was found that half of the respondents reached the educational level of standard eight, whereas forty three (28.7%) had only reached the educational level of standard five and below. The level of education of the respondents could influence the duration of breast-feeding. Mothers with a higher level of education tend to breast-feed for shorter periods as opposed to those with a lower level of education. Only nine (3.3%) of the respondents had received tertiary education.

C. Marital status

The findings revealed that only seventy (47.3%) of the respondents were married. The remaining respondents were all single parents. The marital status could have an impact on the weaning process. Unmarried mothers
may not have the emotional support from a husband, or the father of the child.

D. The type of families the respondents lived in

The data collected in this section revealed factors which could influence the weaning process. Thirty four percent of the respondents still lived in extended families which means that they could receive more support from their families during weaning. In this case a grandmother or an aunt could assist a tired mother and thus make the weaning process easier for her.

Thirty six percent of the respondents lived in nuclear families. In a nuclear family a father may be available to assist the mother and give her emotional support during weaning. Kibel and Wagtaff (1995: 87) warn that a father may be a valuable support person, or he may feel jealous and excluded. If a mother does not receive emotional support from her husband she could find herself isolated.

The remaining respondents either lived alone or cohabited. Where the mother cohabits, her partner could play the role of a husband and provide emotional support for her. On the other hand a mother who lives alone may be isolated during the weaning process. This makes the role of formal support groups important as described in sections 2.3.3.1 of this study.

E. The occupation of the respondents

The data collected from this section revealed that most of the respondents were either involved in free market or they were domestic workers,
housewives or were unemployed.

Employment may be one of the reasons for early weaning, therefore housewives or the unemployed mothers would breast-feed longer. A detailed description of this fact is given in chapter 2.3 of this study. Domestic workers are generally poorly paid, therefore they should be encouraged to breast-feed longer if possible, for economic reasons.

The data was further analysed to determine the relationship between the respondents' occupation and the duration of breast-feeding. Only 14% of the respondents who breast-fed for nine months or longer were qualified as health workers, other professionals or office workers.

It was found that most of the respondents who breast-fed for prolonged periods were domestic workers, housewives, were unemployed or involved in free market.

5.3.2 Health education of respondents (Item F)

From the analysed data it is clear that only a small number of respondents received health education on weaning. This is a matter of concern because health education is important for successful weaning. If a mother does not receive this health education from health workers for example, the community health nurse, she may seek it from diverse persons. According to Castiglia (1992: 38–39), some of the advice may be incorrect and may lead to more problems.
5.3.3 The individuals who gave health education to the respondents (Item G)

There is a clear indication from the analysed data that health workers did very little health education on weaning. Relatives, friends and neighbours of the respondents were more involved in providing information for them than health workers.

The disadvantage of this situation is that if the relatives, friends and neighbours of the respondents are using incorrect methods of weaning, they may transmit the incorrect information to new mothers. Therefore health workers, for example, the community health nurses, should know the correct methods of weaning so that they may pass it on to mothers, who may in turn transmit the knowledge to their relatives, friends or neighbours.

5.3.4 The duration of breast-feeding and problems during weaning (Item H)

It appears that most of the respondents did not experience problems during weaning. However, a significant number of respondents reported that they experienced problems during weaning. The problems included feelings of guilt in the mother, difficulty in comforting the baby, difficulty in letting go of the baby, unhappiness in the child, fear by the mother that her baby would not love her any more, a crying baby, sleep disturbances for the mother, tantrums in the baby and bed-wetting in an older child.

The most common duration of breast-feeding was found to be between nineteen and twenty four months. Brownlee (1990: 16) states that mothers in Africa breast-feed their babies for long periods, that is, fourteen to twenty four months. This sample is in line with the rest of African women.
The analysed data reveals that there was a small number of respondents who had four children and breast-fed the fourth child for nine months or longer. The data reveals that there is almost an equal number of respondents who experienced problems and those who did not, as far as the fourth child is concerned.

5.3.5 The children with whom the respondents had the most problems (Item 1)

The information received from the respondents indicates that although about half of the respondents reported that they did not encounter problems with any of their children when weaning, a significant number of them experienced problems when weaning their first babies. The problems seemed to decrease with the subsequent children. It can be deduced from this data that mothers who breast-feed their first babies need more support, education and counselling during weaning.

5.3.6 The respondents' reasons for weaning

There is an indication from the analysed data that the main reason for weaning was the mothers' perception that the baby was old enough to be weaned. The other reasons which were given by the respondents included employment, inadequate milk and the baby's refusal to drink. The latter reasons for weaning reflect lack of knowledge about weaning because a working mother can still breast-feed and the inadequate milk could be related to supplementation with artificial feeds and rigid feeding practices.
5.3.7 Feeding methods used by the respondents at the time of weaning

The analysed data revealed that almost all the respondents weaned their babies after introduction of solids or family diet, which is a method recommended by UNICEF, WHO and UNESCO (1989: 16–21).

A small number of respondents weaned their babies before introduction of solids or family diet. The disadvantage of such a practice could be malnutrition in an older child because breast milk alone becomes inadequate for a baby after the first six months of life (WHO & UNICEF, 1988: 1–9).

5.3.8 The attitudes of respondents to breast-feeding

Information analysed in this section, reveals that the respondents have a positive attitude towards breast-feeding. They indicated that breast-feeding was a fulfilling experience which made them feel close to their babies, and they believed that their babies enjoyed it and that they were comforted by it.

This is the type of attitude promotes breast-feeding and it should be cultivated and nurtured by giving mothers health education on breast-feeding and weaning.

5.3.9 The duration of the weaning process

It was found that a large number of respondents did not take several weeks to wean their babies. It is indicated in the literature review that weaning a baby off the breast should at least, take three weeks. During this time the breast-feeds are slowly withdrawn and replaced by other means of feeding or drinking.
Abrupt weaning is still practised by some of the respondents, since a large number of mothers took one day to wean. Jubber (1991: 30) considers this type of weaning to be harmful for both the mother and her baby.

5.3.10 Weaning practices or methods

It became clear from analysed data that the most common method of weaning is that of leaving the child with a friend or a relative to prevent the temptation of breast-feeding the child when he/she cries for the breast.

Jubber (1991: 30) views this as a harsh method of weaning since it separates the mother and her child, and this may cause psychological problems in the child and mother. During weaning a child requires love and attention from the mother. A child should therefore not be separated from the mother.

The second most common method of weaning is that of application of distasteful substances, to the breasts to discourage a child from drinking from the breasts. Jubber (1991: 30) considers this method as harsh and cruel.

Physically, these abrupt methods of weaning which are used by the respondents may lead to engorgement of breasts, mastitis or breast abscess.

5.3.11 The type of problems experienced by the respondents

It became clear from the analysed data that the respondents generally experienced various listed problems during weaning.
Feelings of guilt

According to the findings two thirds of the respondents experienced guilt feelings during weaning. Bottorff (1990: 201) warns that mothers may experience feelings of guilt when their babies are upset or cry for the breast. Such a mother could be reassured and praised for having breast-fed her baby. The remaining third of the respondents did not experience feelings of guilt during weaning.

Lack of support during weaning

Half of the respondents indicated that there was a need for support during weaning. Bottorff (1990: 201) states that weaning is difficult and recommends that a mother should have some form of support during this time. This support could be provided by families, communities and health workers. Health workers should be trained in this regard so that they may be able to educate the mother about weaning and give her the needed emotional support. Mother support groups are an alternative to traditional support networks which are disappearing (Ntombela, 1994: 20). UNICEF and WHO encourages formation of mother support groups (Ntombela 1994: 20).

Respondents did not know how to comfort their babies anymore

The majority of the respondents had problems in comforting their babies during weaning. Breast-feeding could not be used to comfort the baby anymore, and new ways of comforting the baby had to be found and the baby had to adapt to them. A crying, sick or tired child can no longer be
comforted with breast-feeds and this upsets both the mother and her baby.

- **A mother may find it difficult to let go of her baby**

  The data revealed that ninety three (61.7%) of the respondents found it difficult to let go of their babies. The closeness between the mother and child, which was associated with breast-feeding, cannot go on forever. There is a time to stop breast-feeding, which must be faced by both the mother and baby and this does seem to be a problem for many mothers.

- **Respondents feel unhappy during weaning**

  The analysed data indicated that the majority of the respondents experienced unhappiness during weaning. This unhappiness in the mother may be a reaction to an upset child (Bottorff 1990: 201).

- **The respondents were worried that their babies would not love them anymore**

  The analysed data revealed that ninety four (62%) of the respondents feared that their babies would not love them anymore if they weaned them. Bishop (1985: 211) states that once a bond is formed it cannot be severed by weaning. Therefore mothers should be reassured about this factor, by making them aware that once a bond has formed between the mother and baby, it cannot be severed. A mother can nurture the bond by using the gentler methods of weaning, such as giving the child more love and attention during weaning.
The baby cried endlessly during weaning

The information received from eighty seven (66,2%) of the respondents indicates that their babies cried endlessly for the breast-feeds.

The implications of this problem are lack of sleep and rest for the mother, and thus leading to stress. Therefore the weaning mother needs assistance with the child from her family. A mother who lives alone may have more problems in this regard. Husbands and family members should be encouraged to assist a mother during weaning.

Sleep disturbances

It was found that ninety six (63,8%) of the respondents experienced sleep disturbances during weaning. It would seem that the sleep disturbances are a result of an upset baby. The mother can no longer use the breast-feeds to put a tired baby to sleep. Bumgarner (1982: 221) admits that the last evening feed is the most difficult to withdraw because it is used to put the child to sleep.

Temper tantrums at the time of weaning

Temper tantrums occur when a toddler fails to secure immediate desires (Cooke 1989: 236). In this case the immediate desire is breast-feeding.

The collected data revealed that eighty five (55,8%) of the respondent's children threw tantrums at the time of weaning. Temper tantrums may be an indication of frustration, insecurity, fatigue and hunger (Hancock 1992:
272). A detailed description of this factor is given in chapters 2 and 4 of this study.

- **The baby looked unhappy**

  The data from eighty eight (58.1%) of the respondents revealed that their babies looked unhappy at the time of weaning.

  A mother whose child looks unhappy will also feel unhappy or guilty.

- **The baby started bed-wetting/wetting himself/herself during weaning**

  It was found that seventy seven (51%) of the respondents' babies who were already "potty" trained, started bed-wetting/wetting themselves during weaning. This type of behaviour in a child who is already "potty" trained, indicates emotional disturbances, as discussed in Chapter 2 of this study.

5.3.12 **The respondents' views about certain aspects of weaning (Item P)**

- **Health education of the respondents**

  It was found that there was a need for health education of mothers about weaning. Health workers should play an important role in the health education of mothers about weaning, with the aim of preventing weaning problems.
Need for support, counselling and guidance during weaning

The data collected from the respondents revealed that there was a need for support, counselling and guidance of mothers during weaning. Health workers should play a vital role in this aspect, after they have been adequately trained to perform this function. The support, counselling and guidance of mothers should begin at antenatal clinics and continue at well baby clinics until mothers have successfully weaned their babies off the breast.

Ensuring that a child is on a family diet before weaning

One hundred and fourteen (76%) of the respondents either agreed or strongly agreed that a child should be on a family diet before he/she is weaned off the breast. This practice will prevent malnutrition in the child and ensure that he adjusts to food before he/she is weaned off the breast.

Explaining to a child who could understand why weaning has to stop

One hundred and seven (71.3%) of the respondents either agreed or strongly agreed that if a child understands the mother’s explanations, she should explain to him/her why breast-feeding has to be stopped. This means that a mother can try to reason with an older child who understands. The respondents' opinions support some of the views discussed in chapter two.
— Giving the child more love and attention during weaning

Thirty one (20.7%) respondents agreed and 100 (73.3%) of them strongly agreed that babies should be given more love and attention during weaning. A baby should not be separated from the mother during weaning so that the mother may give him/her more love and attention. Although some of these respondents sent their babies away for the purpose of weaning, most of them supported the idea of giving more love and attention during weaning.

5.4 CONCLUSIONS OF THE STUDY

The objectives of the study were met and based upon the findings. These following final conclusions were drawn:

— The majority, ninety five (63.3%) of the respondents were between the ages twenty to twenty nine years. A large number of them were single. Only a small number of these mothers received tertiary education, and a large number of them were unskilled workers or were unemployed.

— Respondents experienced problems in varying degrees during the weaning process, especially with the first child. Problems which were identified, are among others, feelings of guilt in the mother, difficulty in comforting the child during weaning and sleep disturbances for the mother.

— Respondents make use of harsh methods and practices, when weaning babies, for example separation of the mother and baby — such as sending a child away to a relative or friend who lives far away.
A definite need for health education, guidance and counselling exist but health workers neglect this aspect and this leads to mothers sometimes being informed by lay persons with harmful ideas.

5.5 RECOMMENDATIONS

The following recommendations have been made as a result of this study.

* Problems during weaning

- Health workers who are involved in mother–and–child care could give mothers adequate health education on correct weaning practices so that weaning problems may be controlled or eliminated. When problems exist, mothers could be advised on how to deal with the problems. Counselling could also be provided for the mothers since there is a need for emotional support.

- Health workers could encourage formation of support groups for weaning mothers. Mothers who are knowledgeable about correct weaning practices may become members of the support groups.

- Research can be undertaken to test the knowledge of health workers on breast–feeding and weaning.

- Motivation of all health workers, especially those involved in mother–and–child care, to give mothers health education on correct weaning practices, during pregnancy and the breast–feeding period.
5.6 CONCLUSION

Educating mothers about weaning should be seen as part of promoting breast-feeding because a mother who experiences problems when weaning one child may choose to bottle feed her next one.

The use of incorrect methods of weaning should be discouraged as this may cause psychological harm to the mother and her baby. Health workers should encourage the use of correct weaning practices.

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BIBLIOGRAPHY


**MATERIAL CONSULTED BUT NOT REFERRED TO**


The Superintendent
Coronation Hospital
Private Bag
NEWCLARE
2112

Dear Sir

re: RESEARCH AT CORONATION NURSING COLLEGE

I, hereby request your permission to conduct research for my Master's Degree (M A Cur-UNISA) at Coronation Hospital.

The research will be on weaning practices and some problems encountered by breast-feeding mothers. Data will be collected by means of interviews and questionnaires, at antenatal and postnatal clinics.

The research will take place between the months July 1993 and December 1993.

Thank you

Yours sincerely

E.A.Waterson (MRS)
(Chief Professional Nurse)

This is to confirm that permission was granted for the above research:

Signature of Superintendent

10/10/1996

Date
UNIVERSITY OF SOUTH AFRICA

A questionnaire for measuring problems experienced by weaning mothers (replacing breast feeds by other means of feeding).

INSTRUCTIONS:

1. Please be honest and frank in the completion of this questionnaire.

2. Confidentiality will be maintained.

3. Please answer the questions as indicated below.

4. This form is to be filled in by mothers who breast-fed for more than 9 months.

5. In every question, mark your response with an X in the appropriate block.

For example, for question A if you are 26 years old and thus fall into the age group 20 - 29 years, then you should cross off the corresponding block as follows:

| Under 20 years | 20 - 29 years | 30 - 39 years | 40 years and older |

A. Indicate your age at the time of weaning.

| Under 20 years | 20 - 29 years | 30 - 39 years | 40 years and older |

B. Indicate your highest qualification.

| Standard 5 & below | Standard 6 - 8 | Standard 9 - 10 | Diploma | Degree |

C. Indicate your marital status.

| Married | Unmarried | Divorced | Widowed |

D. Indicate the type of family you lived in.

[ ] Nuclear family i.e. parents and children

[ ] Extended family i.e. grandparents, parents and children

[ ] Alone with my child/children
E. Indicate your occupation.

- Health worker e.g. nurse
- Other professions e.g. teacher
- Office worker e.g. secretary, bank worker
- Free market i.e. any kind of selling
- Domestic worker
- Housewife
- Unemployed

F. Did you ever receive any health education on weaning

[ ] Yes  [ ] No

If your answer to the above question is "Yes" please answer the following question (G).

G. Indicate the person/persons who educated you on weaning (mark your selected response with an X).

- Health worker at antenatal clinic
- Health worker at post natal clinic
- Health worker at the baby clinic
- Relatives
- Friends
- Neighbours

H. Indicate the duration of breast feeding and whether you had problems or not during weaning.
Duration Experienced problems
(months) | First child | Second child | Third child | Fourth child
--- | --- | --- | --- | ---
Yes | Yes | Yes | Yes
No | No | No | No

I. With which child did you have the most problems.

| First child | Second child | Third child | Fourth child | No problems with all children
--- | --- | --- | --- | ---

J. Select the reason/reasons for weaning the baby. Mark the selected reason/reasons with an X.

- I wanted to wean my baby before starting work
- I was pregnant
- I felt pressurized by others to stop breast feeding
- I thought the baby was old enough to be weaned
- I was sick
- I did not have enough milk
- My baby refused to drink
- My baby was sick
- My baby started biting my breasts

K. Indicate if the baby was doing the following when weaning was commenced (you may select more than one answer). Mark your selected response/responses with an X.

For Computer Use Only

16 17 18

19 20 21

22 23 24

25 26 27

28

29

30

31

32

33

34

35

36

37
L. To what extent do you agree or disagree with the following statements:

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Uncertain</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breastfeeding was a fulfilling experience for me</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Breastfeeding comforted my baby</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I felt close to my baby when I breastfed him/her</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>My baby seemed to be enjoying the breastfeeds</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

M. Indicate how long the weaning process lasted

- One day (abrupt)
- Several days
- Several weeks

N. Indicate how weaning was done. (Mark the selected answer/answers with an X)

- I bound my breasts
- I took medication to dry my milk
I applied distasteful substances e.g. chilli to my nipples to discourage my baby from sucking

Weaning lasted several weeks in which breast feeds were slowly replaced by other means of feeding e.g. cup or bottle

I left the child with a relative/friend for a few days.

O. How frequently did you experience the following feelings or situations when weaning your baby. Mark the block with an X.

<table>
<thead>
<tr>
<th>Feeling/Situation</th>
<th>Never</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>I felt guilty when weaning my baby</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I needed somebody to give me some support</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I did not know how to comfort my baby anymore</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>It was difficult to let go of my baby</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I felt unhappy</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I was worried that my baby would not love me anymore</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>My baby cried endlessly</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>My baby would not sleep and thus kept me awake</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>My baby started throwing tantrums</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>My baby looked unhappy</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>My baby started bed-wetting or wetting himself/herself</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
P. To what extent do you agree or disagree with the following statements. Mark the block with an X.

<table>
<thead>
<tr>
<th>The following statements would make weaning easier</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Uncertain</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health workers should educate mothers about weaning</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Mothers need support, counselling and guidance from health workers during weaning</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The child should be on a family diet before breast feeding is stopped</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>If a child understands, the mother should explain to the child why breast feeding has to stop</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The child should be given more love and attention during weaning</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

THANK YOU FOR YOUR PARTICIPATION AND TIME
Dear Madam

I am doing a Master's degree with UNISA and I am conducting research on weaning practices and some problems encountered by mothers who breast-feed for long periods. The purpose of the study is to investigate the problems so that solutions may be found.

Kindly participate in the research by completing the attached questionnaire. Please answer questions honestly and answer all questions. Confidentiality will be ensured.

Thank you

Yours Sincerely

Emily Waterson (Mrs)

Phone No: (011) 945-1449
(011) 470-9242/7
Dear Mr. J.W. Horn,

I have pleasure informing you that approval has been granted to do research at the following Hospitals:

The approval is subjected to the following conditions:

i) The Superintendents of the different Hospitals must be contacted by yourself to obtain permission to do research.

ii) The research may not intervene with the service of the officers concerned.

iii) The Superintendents of the different Hospitals must always be informed concerning the project.

iv) A copy of the completed treatise must be presented to this Administration.

v) Please bare in mind the position of trust as well as the confidentiality of the treatise.

We wish you success with your project.

Yours faithfully,

DIRECTOR GENERAL