

Chapter Four

RESULTS AND DISCUSSION

4.1 INTRODUCTION

The primary aim of this study was to investigate the feeding practices and perceptions of a group of HIV positive mothers regarding their decision to breast or bottle feed their infants, and to endeavour to understand the role that culture played in this decision. This study was restricted to a small, purposeful sample of HIV positive mothers attending the HIV Clinic at Coronation Hospital.

The findings and discussion thereof are presented in relation to the secondary objectives. There was some convergence between the qualitative and quantitative results and they are therefore discussed in an integrated manner.

4.2 FEEDING PRACTICES OF PARTICIPANTS

4.2.1 The feeding practices in relation to previous children

Figure 4.1. shows the types of feeds that the participants reported giving their previous children.

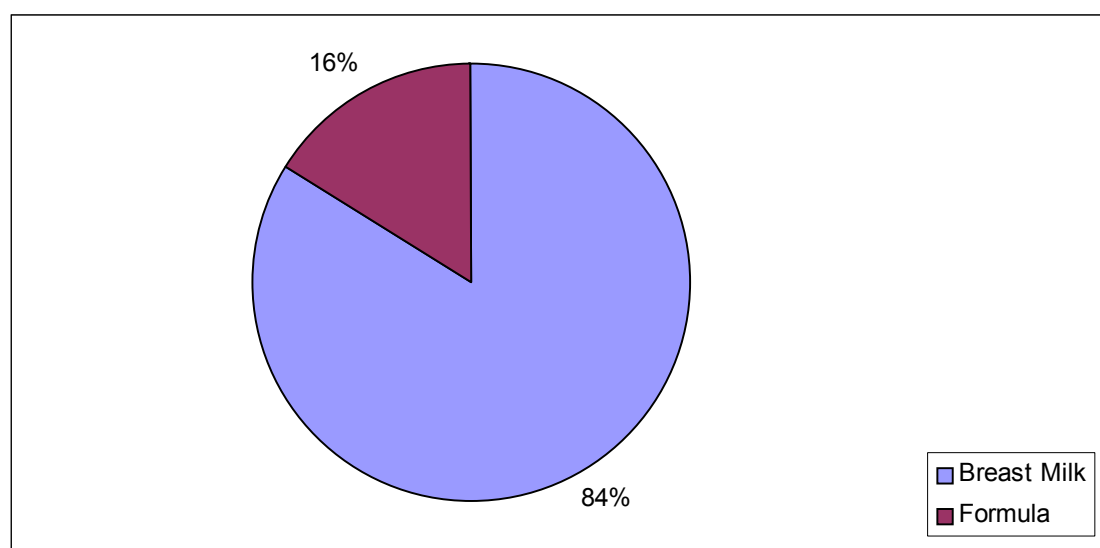


Figure 4.1: Types of feeds given to previous children (N = 24)

Of the 42 participants 24 of them had had previous children. The participants were asked if they had breastfed or formula fed these children. The vast majority of these 24 mothers, i.e. 84% reported that their previous children were exclusively fed breast-milk. Only 16% (7) of participants stated that they had fed their previous children formula milk. These findings were expected as breast-feeding is generally considered the ideal way of providing food for the healthy growth and development of infants and young children (Department of Health, Annual Report, 2003). Reasons for use of formula milk varied. Those that provided their previous children with formula milk explained that they had used formula as their breast milk had dried up, or that their breast milk was not sufficient to sustain the nutritional needs of the baby. One mother used the analogy that *'her breast-milk was like water'*. It is interesting that none of the participants who fed their children with formula milk reported that they had fed them formula milk by choice; they all implied or stated that they had had no alternative but to formula feed their infants.

Those mothers that breastfed their infants started mixed feeds with their infants at a later date than did those mothers who formula fed their infants. Semi-solid foods that were given to the participants' previous infants included mielie-meal porridge, commercially purchased products (such as Purity), and homemade pureed foods (including vegetables that had been mashed up and mixed with water). These substances were all introduced at around two months of age in addition to milk feeds (whether formula or breast-milk), not as a substitute for these feeds. It seemed that the African women in the study introduced solids from 2 months postnatally which is at an earlier age than their Western counterparts, which is usually at 6 months postnatally (McIntyre, 2005). The WHO (2005), recommends the introduction of solids at 6 months of age especially in HIV positive women as they claim that mixed feeding (that is both formula/breast milk and solids) at an early age increases the risk of HIV transmission. The WHO states that if the infant receives breast milk only up to the age of four months, this can actually help the infants' immune system. However, mixed feeding appears to increase the risk of HIV. The WHO states that the reason for this is still being researched. An infant can be born HIV negative or HIV positive but the infant's HIV status within the first year of life is not set in stone, as the blood can seroconvert, from either a positive or negative HIV status to the opposite of what was originally recorded (Coovadia, 2004).

4.2.2 The type of feeds given to the infants in the study since birth

Figure 4.2 depicts the types of feed that infants in the study were exposed to since birth.

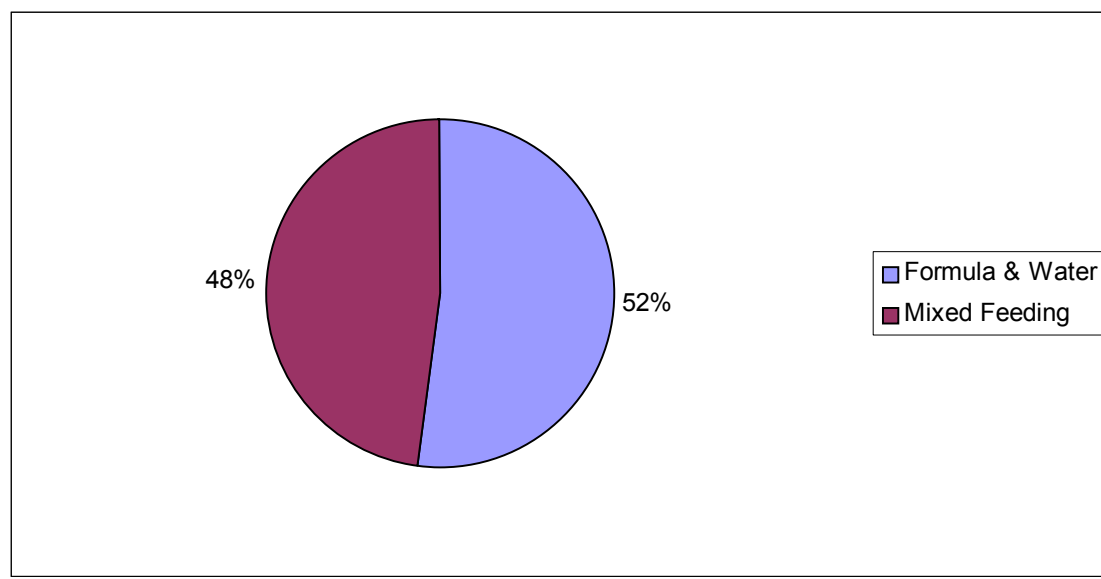


Figure 4.2 Types of feeds given to the infants in the study since birth (N= 42)

Key: Mixed feeding refers to formula, commercial products, mielie-meal as well as breast milk.

The majority of the participants in the study (22 or 52%), reported that they fed their babies exclusively formula milk and water, whilst the remaining 40 (48%) of the participants provided their infants with a mixed diet. The women that were exclusively feeding formula and water explained that they were adopting this procedure, as they wanted to prevent their baby contracting HIV. It has now been established that HIV is transmissible through breast milk (Ziegler, et al, 1985; McIntyre, 2005). Risk factors for the postnatal transmission of the virus include HIV infection acquired

by the mother during breast-feeding, duration of breast-feeding, cracked nipples, mastitis, breast abscesses and oral thrush in the baby. HIV infected cells are present in the breast milk of HIV positive mothers and these infected cells are found in the breast milk throughout the breast-feeding process (Gauteng Health Department, 2005). The feeding policy in respect of infants born to HIV positive mothers, is to exclusively formula feed them (WHO, 2005). In order to reduce the chances of the infant's blood seroconverting from a negative HIV status to a positive HIV status it is recommended that the infant be exclusively formula fed for the first 6 months, with no mixed diet being followed (Coovadia, 2004).

The literature suggests a correlation between an infant contracting HIV and whether or not they are exclusively breastfed for the first four months of life (Kent, 2005). It has been suggested that feeding with anything but breast milk in the first four months may risk damaging the mouth and gut of the infant, thus increasing the ease with which the HIV can pass into the child's blood (Davis-McFarland & Layton, 2000; ASHA, 2005).

Since birth, 20 (48%) of the infants were fed a mixed diet consisting of formula milk, water, mielie-meal porridge and commercially manufactured foods such as Purity. These infants were receiving a mixed diet from the age of 2 to 4 months. These mothers were asked if they had ever fed their infants breast-milk; however, all of the mothers stated that they had never given their infants breast-milk. A possible limitation of the study is that the participants may have altered their answers to provide the researcher with socially desirable responses. Rosnow and Rosenthal (pg 76, 1996), state that social-desirability responding "is the tendency of individuals to respond in ways that elicit a favourable evaluation". As the

interviews were conducted within the hospital setting and participants were aware of the hospital policy regarding infant feeding, it is possible that they may have furnished responses which were in line with the policy.

The clinical implications of these findings for speech-language pathologists and other health care personnel is that they should be aware of cultural factors, in terms of when solids are introduced in the South African community, as these practices might complicate the regimen of enforcing an exclusive formula feeding policy for the first six months of the infant's life.

4.3 ATTITUDES TOWARDS BREASTFEEDING

4.3.1 What feed was regarded as best for infants

According to Table 4.1, 42 participants, 29 (68%) expressed the view that breast milk was the best feed for their infants, as opposed to 10 (22%) who felt the formula was the better option.

This finding could be partly attributed to the 'breast is best' campaign, promoted in all Gauteng Government hospitals as well as cultural beliefs and practices. Breast-feeding is the most natural and hygienic method of feeding (WHO, 2005). One of the participants commented that breast-feeding was 'natural', implying that she felt that formula feeding was 'not natural'. If most of the mothers felt that breastfeeding was better for their babies than was formula feeding, the question can be posed 'Did some of the mothers then still feed their infants breast milk?'.

Table 4.1 Participants' views regarding the type of feed they considered best for their infants (N= 39)

Themes	Participants		Examples of quotes reflecting these themes
	No	%	
Breast is best	29	68%	• “<i>Mother’s milk is the best</i>” • “<i>Our mothers and other women tell us that breast milk will make the child strong</i>” • “<i>It is natural</i>”
Formula is best	10	22%	• “<i>If my baby has my milk she will get sick</i>” • “<i>It is good. It is from the hospital</i>”

Note: The percentages do not total 100% as not all the participants responded to this item.

It is of interest that the results in respect of best feeding practices do not support the findings of an earlier study by Urban (2001). This researcher reported that only 7% (3) of the women in his study felt that breastfeeding was better for their infants than formula feeding. A possible explanation for this discrepancy may be that the Gauteng Health Departments ‘breast is best campaign’, may have had an influence on mothers’ attitudes and practices regarding breast feeding.

4.3.2 Persons perceived to influence the decision regarding infant feeding.

Mothers and their infants do not live in isolation, especially in the South African community, where the relatives all advise the mother and play a huge role in the upbringing of the child (Miller, Easley, Zhang, et al, 2001).

As reflected in Table 4.2, all of the participants stated that it was the mothers themselves who made all decisions regarding feeding of their babies. Only 2 (4%) of the women who were interviewed reported that their partners actively involved themselves in the feeding of the infant. The mothers also stated that their mothers and mothers-in-law tried to influence them as to how the baby should be fed.

The participants admitted to taking the advice of their mothers and mothers-in-law more than half i.e. 25 (59%) of the time. More than two-thirds i.e. 29 (69%) of the mothers informed the researcher that the nursing staff at the hospital influenced their decision regarding whether their infant should be bottle-fed or breastfed. Friends were perceived by 18 (42%) of the participants to have influenced their decisions, especially those friends who had already had previous babies.

Table 4.2 Persons perceived to influence the decision regarding how the infant is fed (N = 42)

Theme	Number of participants responding yes N= 42 100%		Examples of quotes reflecting these influences
Mother herself	42	100%	• <i>"It is my baby so I make the decisions"</i> • <i>"The baby will eat what I give it"</i>
Members of community/culture	29	69%	• <i>"Everyone in my area breastfeeds"</i> • <i>"Everyone says breastfeeding is natural"</i>
Family	25	59%	• <i>"My mother has had 6 children so she knows"</i> • <i>"My mother is helping to look after the baby"</i> • <i>"My family say that you must breastfeed till the child is 2 years"</i>
Health care professionals	18	42%	• <i>"The nurses told me how to feed my baby"</i> • <i>"The hospital told me about the milk"</i>
Spouse or Partner	2	4%	• <i>"He tells me that breast feeding is best"</i>

Note: The percentages on the table did not total 100% as mothers often responded to more than one influence

It was surprising that only 29 (69%) of mothers stated that they were influenced by staff at the hospital on how to feed their infant, especially after receiving counselling and brochures in their home language on how best to feed their babies to avoid transmitting the virus. Although, this is a high proportion, one would have expected all the participants to have been influenced by the hospital staff, with regard to the feeding of their infant.

The clinical implications of these findings are that speech-language pathologists and other medical personnel who are required to assist with infant feeding management need to be aware that many mothers within the South African community feel that breastfeeding is the best method of feeding. Furthermore, these results indicate that cultural factors and other family members of the person living with HIV/AIDS are likely to influence the person with regard to feeding choices for their infant. These results highlight the need for further research into the influence that family members may exert on the infant feeding and child rearing practices of mothers living with HIV/AIDS.

4.4 FORMULA AND BOTTLE-FEEDING

The reasons why participants' fed their infants formula milk are presented in Table 4.3 and the participants attitudes towards formula feeding are presented in Table 4.4. The results indicated that the majority of the women were feeding their infants formula due to fear of them acquiring HIV/AIDS. The participants were asked if they received any advice on how their baby should be fed. Of the participants interviewed, 18 (42%), reported that they were

told by the nurses at the hospital that they should exclusively feed their infants formula milk. However, only 26 (60%) understood that the reason for this advice was that their HIV status was not transferred to their baby. It is therefore possible that some of the mothers may have been feeding their children breast milk but did not want to be seen adopting this practice in case they were told they could no longer receive free formula milk. In this way they may have been feeding their infants a mixed diet and thereby putting their children at risk of seroconversion (Coovadia, 2004).

Fear

The most common theme that surfaced as the reason for participants giving their infants formula, was fear. It was a theme that recurred in the responses of 52% of the participants. This finding was consistent with the research literature that there is a lot of fear and stigma surrounding the disease of HIV, despite the amount of money spent on education of the public regarding the condition (Dohrn, 2005). It is acknowledged that a limitation of the study is that further probing may have yielded more themes related to the participants' reasons for choosing bottle-feeding. Themes that emerged from the participants' attitudes towards formula feeding, were resentment and negativity, confusion and a sense of failure and guilt.

Table 4.3 Reasons for feeding infants with formula milk (N=42)

Themes	Participants		Examples of quotations reflecting these themes
	No	%	
Fear of the infant contracting HIV/AIDS	22	52%	• “My milk is bad. The hospital milk is good” • “I don’t want my baby to be sick” • “I am scared of baby getting the AIDS”
Hospital personnel told the mothers what to feed their infants	18	42%	• “The hospital gives me the milk” • “The hospital said my baby will die if I don’t give the formula” • “The clinic said the baby will be healthy if he drinks their milk”

Note: The percentages do not total 100% as mothers often provided more than one reason.

Table 4.4 highlights the main themes that emerged from an analysis of participants’ attitudes towards formula feeding.

Table 4.4. Attitudes towards formula feeding (N= 38)

Theme	Participants		Examples of quotations reflecting these themes
	No	%	
Resentment and negativity	20	51%	• <i>“I want to be able to feed my child and I can’t”</i> • <i>“It is not my milk”</i> • <i>“I hate the formula”</i> • <i>“It is the white man’s milk”</i>
Confusion	6	14%	• <i>“I don’t know why my baby must drink it”</i> • <i>“My milk is good why must I give the formula?”</i>
Sense of failure	4	10%	• <i>“I don’t know why the baby can’t have my milk. Am I a bad mother?”</i> • <i>“My milk is sick, and I wanted to feed the baby”</i>

Note: The percentages do not total 100% as mothers often provided more than one response.

Resentment and negativity

When the participants were asked how they felt about formula and bottle-feeding, resentment and negativity emerged as a common theme, reflected in the responses of 13 (30%) of the participants. For example one participant stated that she felt resentful because her right to feed her child was taken away, “...*I want to be able to feed my child and I can’t...*”. Another participant resented the fact that she was unable to feed her child as it was not her own milk. In hindsight, the interviewer should have further probed in order to ascertain towards whom the participants felt this resentment, i.e. towards themselves or towards the hospital, or indeed if it was towards the HIV virus with which they were infected.

Another emotional reaction that was closely linked to resentment that was expressed by participants was that of negativity. For example one participant stated that “*the formula was bad*“. Another participant reported that the “*formula was the white man’s milk*”|. The connotation was that the powdered milk had been manufactured by white persons and was part of the lifestyle of white people. The formula is also usually distributed by white staff members at Coronation Hospital, which may have further reinforced these beliefs. With South Africa’s apartheid past, African people may be suspicious of ‘gifts’ or materials/supplies that they have been given by white people (McIntyre, 2005).

Confusion

Participants also conveyed feelings of confusion and appeared unsure why they had to feed their babies formula milk. This finding may have been linked to their lack of knowledge of HIV and the role

that formula can play in preventing transmission of the virus. For example, one participant commented, “*I don’t know why my baby must drink this*”. In a similar vein, another participant informed the researcher that she had an abundant supply of breast milk and added, “*My milk is good. Why must I give the formula?*”.

Sense of failure and guilt

Participants reported a sense of failure at not being able to fulfil their culturally expected duties as a mother. One participant asked if not being able to give her baby breast milk implied that she was a bad mother. This participant commented “*I don’t know why the baby can’t have my milk. Am I a bad mother?*”. Another participant expressed the desire to feed her baby and then being told by the hospital that she was not allowed to and how this represented a sense of failure for her. In the African community being able to breastfeed your own child is seen as fulfilling one’s role as a woman and a mother (Dohrn, 2005).

4.5 INFANTS RECEIVING BOTH FORMULA AND BREAST MILK

None of the mothers who were interviewed reported that they fed their infants breast milk as well as formula milk. They explained that they did not want to make their babies sick. This finding suggested that the Gauteng Department of Health’s programme of education and counselling regarding HIV transmission had been effective with this group of mothers at Coronation Hospital. However, it is also possible that the participants may have been providing the researcher with answers that they knew were expected

(social desirability responses). The administration of an anonymous self-administered questionnaire may have yielded different results.

Breastfeeding is promoted as it is an activity that promotes bonding between mother and child (Louw & Avenant, 2002). Consequently, a further limitation of the study related to the fact that the researcher failed to explore whether participants felt that they had still bonded with their child despite not breastfeeding. Breastfeeding is also an activity that is enjoyable for the infant and promotes the infant's security. In hindsight, the researcher could have probed those areas more fully (Coovadia, 2005).

In summary, these findings suggest the need for speech-language pathologists and other health care personnel to provide additional information and advice to mothers on infant feeding, and to establish groups where participants can be afforded opportunities to express their feelings and derive support from others in the same situation.

4.6 AWARENESS OF HIV TRANSMISSION ROUTES

Table 4.5 shows the proportion of participants who displayed awareness of the fact that breast milk was a route of transmission of HIV/AIDS.

Table 4.5 Awareness of breast milk as a route of transmission for HIV/AIDS (N = 42)

Themes	Participants		Examples of quotations reflecting these themes
	No	%	
Awareness present	30	71%	• “Yes, my milk can make my baby sick” • “Yes milk can give it (HIV) to baby”
Lack of awareness	10	24%	• “I did not know. I thought you could only get HIV from sex” • “No, breast milk is good”

Note: percentage do not total 100% as mothers often responded to more than one theme

The participants were asked how HIV/AIDS was transmitted, in order to ascertain their knowledge of the subject and to determine if the HIV counselling sessions had been successful. Thematic content analysis of their responses regarding routes of transmission of HIV/AIDS is reflected in Table 4.6.

Table 4.6 Participants who perceived that HIV/AIDS could be transmitted between individuals (N=42)

Theme	Participants		Examples of quotes reflecting these themes
	No	%	
Sexual intercourse	42	100%	• “If you have sex you can get AIDS” • “If two people sleep together”
Blood	42	100%	• “Bad blood into you makes your blood bad”
Breastfeeding	30	71%	• “Your milk can make the baby sick” • “HIV goes through the milk into your baby”
Kissing	3	7%	• “If you kiss someone with the disease you get it”

Note: The percentages do not total 100% as participants often provided more than one transmission route.

In the present study 30 (71%) of the participants were aware that HIV could be transmitted through breast milk; however 24% of the participants were unaware that HIV could be transmitted through this route. In the present study participants' answers appeared to contradict responses that they made to different items on the interview schedule. For example, all the participants in the study reported not feeding their infants breast milk; however, not all of the participants were aware that the virus was transmitted through breast milk. Thus the truthfulness of the participants' responses is questionable. Moreover, if the majority of the participants were unaware of or, in any doubt that HIV could be transmitted through breast milk then it is possible that some of the mothers might have been breastfeeding their infants. In a study by Urban (2001), he reported that almost all the women in his study had a good general understanding of how HIV is transmitted between adults, but only 40% of his participants were aware that HIV could be transmitted in breast milk.

This finding suggests that since Urban's study in 2001, the education of HIV positive mothers in Government Hospitals as to HIV transmission, may have improved. Although the majority of the participants in the present study were aware that breast-feeding of their child could result in the child becoming HIV positive, they were unaware of how this transmission took place.

The results of the study highlight the need for improved HIV information and counselling sessions not only to HIV positive mothers but for the community and public at large. According to

(McIntyre, 2005) HIV is a largely misunderstood disease which people fear.

4.7 ANTENATAL AND HIV COUNSELLING

According to Figure 4.3, 24 (58%) of participants perceived the counselling provided by the hospital to be adequate, while 18 (42%) felt that this service was inadequate.

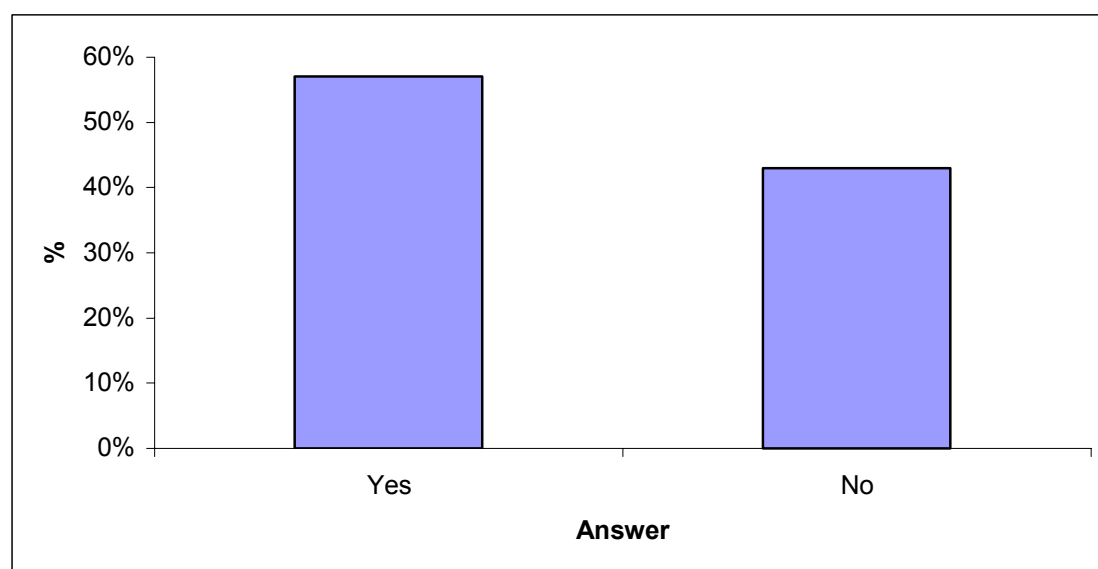


Figure 4.3 Perceived adequacy of counselling provided by the hospital (N=42)

The procedure adopted at Coronation Hospital as well as other Gauteng Hospitals is that each HIV infected individual is expected to receive pre-HIV test counselling as well as post-test counselling. This pre and post counselling is conducted on an individual basis. The patients are told of their actual HIV/AIDS diagnosis on an individual basis by a medical professional. If the individual is diagnosed with HIV/AIDS then they are entitled to three sessions of counselling, which takes place in a group setting. However, Dr

Coovadia (Head of HIV at Coronation Hospital, March 2005), states that to his knowledge full use is not always made of the three counselling sessions. Reasons for not participating in the free counselling may be due to transportation, financial and time constraints.

The Department of Health released a booklet in 2003 called Key Health Statistics. The report stated that HIV prevalence amongst antenatal clinic attendees increased post 1990 but appeared to have stabilised since 1998. In 1990 the proportion of antenatal clinic attendees who were HIV positive was 0.7%; in 1998 this figure reached 22.8% and in 2002 this figure stabilised at 26.5% of the antenatal attendees (Antenatal HIV Survey, 2003).

The majority of the participants (38 or 90%) were diagnosed with HIV in their current pregnancy. The remaining participants were diagnosed before their last pregnancy (4 or 10%), however, it was unclear if they consciously decided to have another baby or if the pregnancy was unplanned.

Almost all i.e. 41 (95%) of the participants in the present study, informed the researcher that they had received two individual counselling sessions regarding their HIV/AIDS status. If a comparison is made between the HIV positive antenatal attendees at Baragwanath hospital (Urban, 2001) and those in this study, the two results support each other. A possible limitation of this study is that the reason for the participants only receiving two instead of three counselling sessions was not probed further. All of the participants expressed the view that they had not received sufficient counselling about HIV/AIDS. In fact, they all commented that they would very much like to receive more counselling. One of the

participants stated that as the post test counselling was in a group setting they felt inhibited in terms of talking or asking questions. Each participant was expected to participate in three counselling sessions, in a group setting, whereas the number of actual sessions that each participant received was only two.

The participants were then asked how many counselling sessions they would have liked to have had, and the majority stated that they would have preferred five sessions, with some of those sessions being on an individual basis. When Dr Coovadia (21 March, 2005) was asked why the clinic attendees only received three counselling sessions, all of which were in a group setting, he explained that the reason for this reduction was a lack of funding and manpower.

A limitation of this section of the interview schedule is that it focused primarily on the quantity rather than the quality of counselling received. Hence, future researchers need to explore satisfaction with perceived quality of counselling. Nevertheless, these findings have important implications for speech-language pathologists and medical personnel who need to realise that many patients living with HIV/AIDS may not have received sufficient counselling. They may not understand many issues and may have many questions related to their illness.

4.8 PARTICIPANTS' FEELINGS REGARDING THEIR HIV POSITIVE STATUS

Participants' feelings regarding their HIV positive status were probed and the responses were subjected to thematic content analysis, the results of which are displayed in Table 4.7.

Table 4.7 Participants' feelings regarding their HIV positive status (N=42)

Themes	Participants		Examples of quotations reflecting these themes.
	No	%	
Acceptance	32	76%	• <i>"I am not the only one."</i> • <i>"Many people have it."</i> • <i>"I must carry on"</i> • <i>"I have to live with it."</i>
Fear	30	71%	• <i>"What will happen to my child?"</i> • <i>"I don't know what to do."</i> • <i>"I want to run away."</i> • <i>"I am scared."</i>
Anger	28	67%	• <i>"I hate the man that gave it to me."</i> • <i>"I want to cut the HIV out."</i>
Sadness	18	43%	• <i>"I feel like crying."</i> • <i>"Eehh, I am so sad."</i>
Denial	10	24%	• <i>"I am not sick."</i> • <i>"I will get better."</i> • <i>"It's going to go away."</i>

Note: The percentages do not total 100% as mothers often responded to more than one feeling or emotion

Participants indicated that they were experiencing a range of emotions. According to Urban (2001), the emotions that a patient may be experiencing is often an indicator of their level of understanding of HIV/AIDS. Despite increasing awareness of HIV/AIDS and its symptoms in the public arena, people living with the condition may still experience the stigma attached to illness (Dohrn, 2005).

Acceptance

The most commonly reported emotion from the participants in this study, was one of acceptance, which was reported by 32 (76%) of participants. This finding is consistent with those documented in previous studies in the area. For example a study by Brent, Redd, Dworetz, D'Amico and Greenberg (1995), stated that acceptance of a patient's HIV status was the final stage in dealing with the disease.

Fear

Fear was highlighted by 30 (71%) of participants, with one of the participants expressing the need to "*run away*". This finding suggests that the participants in this study were manifesting reactions that are considered to be in keeping with the transitional stage of adaptation between early or short term reactions, and late reactions. It is interesting that when the results of this study are compared to Urban's study (2001), he noted that the overriding emotion felt by 32 (76%) of his participants was fear, in relation to their HIV diagnosis. Urban (2001) did not assign much significance to his participants' emotional reactions to their HIV diagnosis, as he did not foresee that their emotions would in any way affect their coping strategies.

Anger

Anger was reported by 28 (67%) of participants. Anger is reported in the literature as the dominant reaction to the diagnosis of a terminal illness (Gilbert, Selikow & Walker, 2002). More specifically, anger is reported to be the intermediate stage of several models of psychosocial adaptation (Livneh, Antonak & Gerhardt, 2001). In light of the temporal and fluctuating dynamic of adaptation and psychosocial reactions to a chronic disease, it might be argued that it was not possible to identify the exact stage that participants were experiencing; however it was evident that the participants were probably in a state of dynamic psychosocial adaptation.

Sadness

As many as 18 (43%) of participants in the study also expressed their feelings of sadness in relation to their HIV positive status. The schedule did however allow participants to qualify how these feelings affected them. Statements from participants indicated that they were ready to break down and that they could be considered to be experiencing depression. These participants voiced their concerns for the future and for their life expectancy. In addition, the participants conveyed their sadness in relation to the future for themselves and for their infants. Concerns were expressed about their life expectancy as well as who would take care of their child once they had passed away. This finding is in keeping with the research literature that people living with HIV/AIDS are frequently overwhelmed with feelings of sadness (Ndaba & Burns, 2005).

In hindsight the researcher should have further probed the impact that these emotions and feelings that the participants were experiencing had on the establishment of bonds between mother and child. A further investigation into this area could perhaps probe the feelings and emotions that mothers living with HIV/AIDS are likely to experience in relation to their children.

Denial

Reports from participants in the present study also included denial that they had the disease. Responses that encapsulated this theme included the comment by one participant, *"It's going to go away"* while another participant stated, *"I am not sick, I will get better"*. This finding has important implications for speech-language pathologists and medical personnel as it could potentially impact on the infant feeding practices and transmission of the virus and once again highlights the need for more in-depth counselling and information dissemination.

It has been suggested that a person's feelings and emotions towards their HIV positive status is likely to affect their coping strategies. For example, it has been suggested that anger, fear and sadness may all lead to a negative coping strategies, and alternatively that a negative coping strategy may lead to a deterioration in the quality of life, and hence maladaptive negative coping (Weiss & Lonnquist, 2000). Future research could further probe the participants' methods of coping, not only with the disease but also with having a new baby to look after.

4.9 PARTICIPANTS' PERCEPTIONS OF THEIR COMMUNITIES' ATTITUDES TOWARDS BOTTLE-FEEDING

The majority of the participants (34 or 80%), commented that they would never bottle feed in front of other women. The participants were asked to rate what they thought their community's general attitude was to bottle-feeding, by using a 3-point rating scale of positive, neutral or negative. The majority, that is 28 (67%) of the participants felt that their community would have a negative attitude towards bottle-feeding, whilst only 5 (12%) of the participants felt that their community would adopt a positive stance. These findings were similar to those documented by Urban (2001) who reported that 33% of his participants were subjected to criticism from members of their community for bottle-feeding.

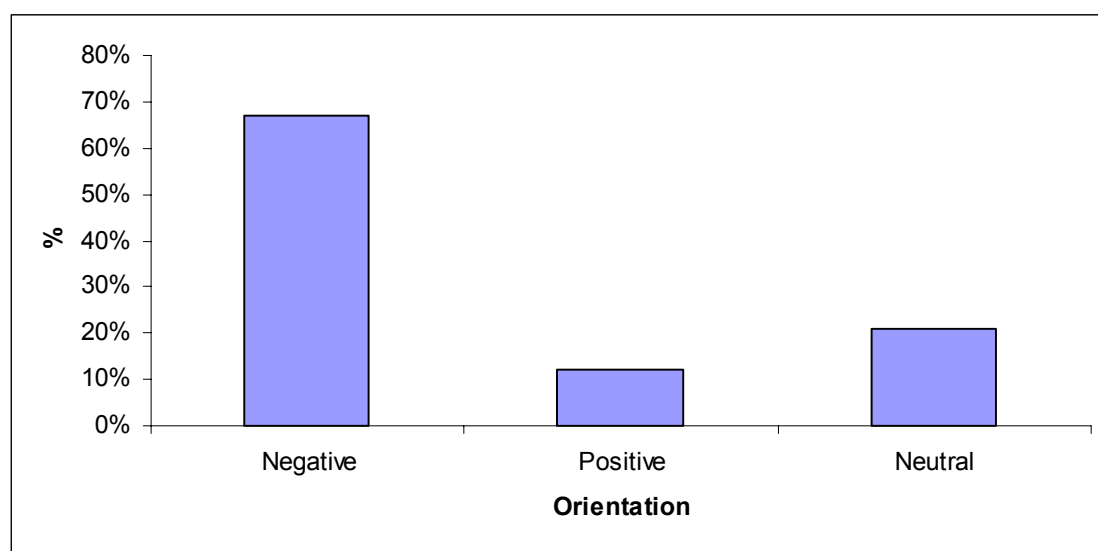


Figure 4.4 Participants' perceptions of their communities attitudes to bottle-feeding (N= 42)

The risk of transmission of the HIV virus through breast milk remains high, and whilst the current policy is still being debated it appears that formula and bottle-feeding is the favoured method of feeding infants born to HIV positive mothers. However cultural practices continue to exert an influence. By South African cultural

standards, a woman who bottle-feeds is at risk of identifying herself to her family and community as HIV positive, with the potential sequelae of social and economic isolation and even rejection and abandonment (Dohrn, 2005). Perceived community associations or connotations with bottle-feeding are shown in Table 4.8.

Table 4.8 Perceived connotations of bottle feeding for members of the community (N=37)

Themes	Participants		Examples of quotes reflecting these themes
	No	%	
Indicative of having HIV/AIDS	25	68%	• <i>“Only reason why a mother can’t feed her own child.”</i> • <i>“If her milk is not good she has HIV.”</i>
Unfit mother	15	41%	• <i>“Can’t be a proper mother if you don’t breastfeed.”</i>
Having another sickness	14	38%	• <i>“The mother might have TB (Tuberculosis)”</i> • <i>“If the mother is sick, she cannot feed.”</i>
Being like a white or a modern woman	6	16%	• <i>“Trying to copy the white woman with the bottle.”</i> • <i>“It is the modern way.”</i>
Having poor breast milk	4	11%	• <i>“Having milk like water.”</i>

Note: The percentages of the table on the page do not total 100% as mothers often referred to more than one connotation.

Indicative of having HIV/AIDS

The most common theme that emerged and that was reported by the majority of the participants (25 or 68%), was that bottle-feeding your child in the African community was indicative of having HIV/AIDS. One of the participants stated that her community felt that “*the only reason why a mother can’t feed her own child is when she has HIV*”. Another participant in the study commented that if the community learns that a mother’s milk supply is not good then it is assumed that she must have HIV, and the community will not accept any other explanation.

Unfit mother

Another theme that emerged from the study was that if a mother was bottle-feeding her child, then she was considered to be an unfit mother. This theme was reflected in the responses of 18 (41%) of the participants. This theme was starkly captured in the response: “*You can’t be a proper mother if you don’t breastfeed*”.

Having another sickness

Only 16 (38%) of the participants stated that by bottle-feeding, their community suspected them of having another disease, apart from HIV. The only type of disease alternative to HIV that was mentioned was tuberculosis. A weakness of the study was that no attempt was made to explore other types of illnesses the community might associate with bottle-feeding.

Being like a white or modern woman

Of the participants, only 6 (16%) reported that if they were seen bottle-feeding by members of their community, they would be regarded as being modern women. The participants stated that although their community saw them as being modern women, this perception nevertheless had negative connotations. These negative connotations were eloquently expressed by one participant when she said that by bottle-feeding, her community felt that she was “*trying to copy the white woman with the bottle*”. Although bottle-feeding, and in particular formula feeding has been practised since World War II, many persons within the South African community appear reluctant to accept this western method of infant feeding.

Having poor breast milk

Another theme that was conveyed by 5 (11%) of the participants was that if a mother bottle-fed then she was seen as having poor breast milk. One of the participants whose response reflected this theme stated; “*when a mother bottle-fed her child the community would say that she was doing so because she had milk like water*”.

The clinical implications of these findings are that speech-language pathologists and other health care personnel who are required to assist with bottle-feeding management need to be aware of community attitudes and perceptions regarding bottle-feeding.

4.10 FORMULA AND BOTTLE-FEEDING PRACTICES

The World Health Organisation standards recommend avoidance of all breastfeeding “when replacement feeding is acceptable, feasible, affordable, sustainable and safe” (WHO, 2005). The fact that the majority of households in urban areas in South Africa have access to safe water and infant formula from special programmes for HIV positive women, has made bottle feeding easier (McIntyre, 2005). However, where the prevailing hospital leadership and cultural beliefs support exclusive breastfeeding, bottle-feeding remains a challenge.

4.10.1 Bottle-feeding Practices

The preparation of the milk formula was examined in respect of two areas: hygiene and accuracy of mixing. As discussed in chapter two, errors in either hygiene or mixing can have detrimental effects on the baby. The difficulty with assessing these areas is that the preparation of the formula often depends on socio-economic circumstances. For example, the effect of poor hygiene is likely to depend on whether a clean water source is available. However, it was beyond the scope of this study to assess whether growth, morbidity and mortality were significantly affected by inaccurate formula feeding.

Of the participants interviewed, the majority (35 or 83%), lived in a dwelling with running water and 30 (71%) had electricity within the dwelling. Furthermore, the majority of the participants, (32 or 76%) were able to have both their bottles and the water for the formula sterilized, as they had access to appropriate sanitation,

whilst only 2%(1) of the participants reported that she was unable to have the water boiled or the bottles sterilized.

Table 4.9 indicates the reported hygiene precautions that were adopted and the methods used by the mothers for the mixing of formula.

Table 4.9 Participants' reports regarding hygiene and mixing of formula for bottle-feeding (N= 42)

Hygiene - Description	No	Percentage
Both water and bottles sterilized	32	77%
Water boiled, but bottles not sterilized	6	14%
Water not boiled, but bottles sterilized	3	7%
Neither water nor bottles sterilized	1	2%
Mixing - Description	No	Percentage
Perfectly accurate	28	67
Minor inaccuracies (scoops heaped or powder added before water)	11	26
Major inaccuracies (large discrepancy between powder and water)	3	7

With regard to mixing of the formula and water, the majority (28 or 67%) of the participants believed that they were mixing perfectly accurately. Only 3 (7%) of the participants felt that they had not mixed the powdered formula and the water correctly. However, a limitation of this item is that it probed perceptions and did not measure objective behaviour. When asked to elaborate on their mixing procedures participants explained that they had never been shown how to mix the formula correctly. Some of the women commented that when they asked the nurse how to mix the formula they were told to read the instructions on the side of the tin. Commercial infant formula, based on modified cow's milk or soy protein, is closest in nutrient composition to breast milk, although it may lack some substances such as long chain fatty acids present in breast milk. It is usually adequately fortified with micronutrients including iron (Sheard, 1993). Formula is usually available as a powder to be reconstituted with water. The instructions on the tin for mixing the formula should be followed exactly to ensure that it is not too concentrated or diluted. Over-concentration can overload the infant with salts and protein which can be dangerous, and over-dilution can lead to malnutrition. The recommendation is that approximately 20kg of powdered infant formula is needed for feeding infants in the first six months of life (IOCU/IBFAN 1993). The policy at Coronation Hospital was to distribute two 1,8kg tins of infant formula to HIV positive mothers with infants, for the first six months of their lives. The fact that some participants were told to read the instructions on the tin, is of concern as some mothers may have difficulty reading and understanding English if it is not their home language.

4.10.2 Final consumption point of the formula

All the participants came to the hospital to collect their formula. They all insisted that they fed their babies with the formula that they received, and all adamantly denied giving the formula to any other children or family members, or selling the formula that they received for financial gain. Unfortunately there was no way of determining the accuracy of this information and whether social desirability responding took place.

As formula milk was only being provided free-of-charge for the first six months, a concern of the researcher focused on what the infants would be fed once their mothers had to start purchasing their own formula. The impact of paediatric HIV/AIDS on infants and toddlers is that their feeding is often compromised by many infections (Bam, Kritzinger & Louw, 2003). Formula is expensive and if a baby is on formula milk it is recommended that they receive the formula exclusively for six months and thereafter in conjunction with solids and other liquids such as water, tea, juice, and so forth, until the age of twelve months (Personal correspondence with Nestle formula manufacturers). There would appear to be a need for Government Hospitals to provide milk formula for twelve months rather than six months. However, the financial and resource constraints currently experienced by the South African Dept. of Health at the time of the study (Coovadia, 2005) highlight the ethical issue of distributive justice.

4.11 SUMMARY OF THE CHAPTER

Feeding policies at the time of the study tended to promote breastfeeding for all infants, as it is safe, convenient and of the

most nutritional value. However, breastfeeding is viewed as a primary method of HIV transmission (Gilbert, Selikov & Walker, 2002). The majority of mothers interviewed (24 or 84%) had fed their previous children breast milk, which was in contrast to the infant feeding practices all of the mothers had in relation to their present children, all of whom were reported to be formula fed. There was no way to determine if this was a true or social desirability response.

Two-thirds of mothers' felt that breast milk was more beneficial for an infant compared with one-third who felt that formula milk was more beneficial. Participants reported that they were influenced by others with regard to their feeding of their infant. The order of significance of the influences were their community/culture; family; health care professionals and lastly their spouses or partners. The major reason for mothers in the study feeding their infants with formula milk was a fear of the infant contracting HIV/AIDS (22 or 52%) and to a lesser extent due to the advice of hospital personnel (18 or 42%). Mothers had different attitudes towards formula feeding ranging from the most frequently reported theme of resentment and negativity through to confusion and the least common theme being a sense of failure. The majority of the participants felt that their choice of feeding method had been taken away from them.

The participants perceived that their communities attached a number of connotations to bottle feeding. The majority of the participants (25 or 68%) felt that bottle feeding was an indication of a mother having HIV/AIDS. Most of the participants were aware that HIV could be transmitted between individuals from sexual intercourse and blood. However of the participants only 30 (71%) of them

recognized breastfeeding as a route for HIV transmission, despite having received informational counselling and free formula milk. This finding calls into question the fact that all of the participants reported exclusively formula feeding their infants. In relation to this finding 18 (42%) of the mothers felt that the counselling provided at the hospital was adequate. The mothers' feelings regarding their HIV positive status ranged from acceptance to denial.