Nurses’ counseling to mothers to prevent mother to child transmission of HIV through breastfeeding
A qualitative study

Jennie Lundkvist
Emma Staflin

Sjuksköterskeprogrammet, 180 hp
Examensarbete 15 hp, grundnivå
Litteraturstudie
Vårterminen 2011
Handledare: Universitetsadjunkt Eva Molander IMH
Nurses’ counseling to mothers to prevent mother to child transmission of HIV through breastfeeding
A qualitative study
Abstract

Introduction: HIV is a serious problem in Namibia, 13.1% of the adult population is HIV-positive or is a carrier of AIDS. This is one of the highest numbers in the world. HIV is passed from mother to child during pregnancy, during labour or through breast milk. 18.8% of the pregnant mothers in Namibia who is in contact with the maternity welfare have HIV.

Aim: The aim of the study was to describe nurses’ counseling to mothers to prevent mother to child transmission of HIV through breastfeeding.

Method: Eight nurses working with PMTCT of HIV were interviewed in Namibia. The interviews were transcribed and a content analysis was made. 18 sub-categories and seven categories were found.

Findings: It is important that nurses provide individual counseling, are supportive and motivate the mothers. Poverty is an obstacle for the mothers, stigmatization occurs and cultural differences can have influence on the mothers. It is also important that nurses are updated in counseling and PMTCT.

Conclusion: Nurses should provide mothers with the correct information in a pedagogical way. Nurses need to be aware of obstacles for the mothers and their families to be able to meet their different demands. Men are not involved in PMTCT-counseling and nurses think that partner involvement would benefit PMTCT of HIV.

Keywords: HIV Infections/prevention & control*, Nursing, Counseling, Qualitative content analysis
**Table of content**

Introduction .......................................................................................................................... 1
Aim ....................................................................................................................................... 1
Background ........................................................................................................................... 1
- Namibia .............................................................................................................................. 1
- HIV ................................................................................................................................... 1
- HIV-transmission through breastfeeding ......................................................................... 2
  - The risk of mixed feeding for HIV-positive mothers ...................................................... 2
  - Nipple care for HIV-positive mothers ........................................................................... 2
- HIV-treatment .................................................................................................................. 2
Guidelines and policies ....................................................................................................... 3
- WHO guidelines on HIV and infant feeding ................................................................. 3
  - Recommendations ....................................................................................................... 3
- The Namibian policy on infant feeding and young child nutrition ................................. 3
Nursing ................................................................................................................................. 3
Counseling ............................................................................................................................ 4
- Counseling recommendations in Namibia ........................................................................ 4
Questions at Issue ................................................................................................................. 5
Method .................................................................................................................................. 5
- Sampling ........................................................................................................................... 5
  - Ethical aspects ................................................................................................................. 6
- Qualitative interviews ..................................................................................................... 6
Content analysis ................................................................................................................... 6
Findings .................................................................................................................................. 7
- To give individual counseling ......................................................................................... 8
- To be supportive ............................................................................................................... 9
- To motivate the mothers ................................................................................................ 10
- Poverty is an obstacle for the mothers ............................................................................ 11
- Stigmatization occurs ..................................................................................................... 12
- Cultural differences can have influence on the mothers ............................................. 12
- To be updated in counseling and PMTCT .................................................................... 13
Discussion of method ......................................................................................................... 13
Discussion of findings ....................................................................................................... 15
Conclusion ............................................................................................................................ 20
References ............................................................................................................................. 21
**Abbreviations and glossary**

AFASS – Acceptable, feasible, affordable, sustainable and safe
AIDS – Acquired immunodeficiency syndrome
ANC – Ante natal clinic
ARV – Antiretroviral drugs
CD4-count - A measure of the strength of the immune system
GATHER – Greet the clients, Ask the clients about themselves, Tell (inform) the clients, Help, Explain what to do, Return for follow up.
HAART – Highly active antiretroviral treatment
HIV – Human immunodeficiency virus
ICN – International council of nurses
MTCT – Mother to child transmission
PMTCT – Prevention to mother to child transmission
UNAM – University of Namibia
UNICEF – united Nations children’s fund
WHO – World health organization
Introduction
Human immunodeficiency virus (HIV) is a serious problem in Namibia. A total of 13.1% of the adult population in Namibia are HIV-positive or have acquired immunodeficiency syndrome (AIDS). This is one of the highest numbers in the world (1). HIV is passed from mother to child during pregnancy, during labour or through breast milk (2). 18.8% of the pregnant mothers in Namibia who are in contact with the maternity welfare have HIV. The substitute to breastfeeding is to give replacement feeding, but in low income countries such as Namibia this is not always acceptable, feasible, affordable, sustainable and safe (AFASS) (3). The prevention of mother to child transmission program has been established to prevent mother to child transmission of HIV in Namibia. It is a program used by all health workers especially those working in the maternity section. In Namibia nurses in the maternity section use the GATHER-approach which is an individual counseling technique to educate mothers about prevention of mother to child transmission (PMTCT) of HIV (4).

Aim
The aim of the study was to describe nurses’ counseling to mothers to prevent mother to child transmission of HIV through breastfeeding.

The term mothers refers to pregnant women and mothers.

Background
Namibia
Namibia is a politically stable republic in southern Africa. There are 2.3 million people living in Namibia, one third of the population has access to sanitation and 90% have access to clean water. English is the official language but there are many other native languages in the country (5). Namibia is one of the richest countries in Africa, but there are big differences between poor and wealthy (6). All Namibian inhabitants have the right to schooling for at least ten years and 90% of the children attend school (5).

Out of all births in Namibia 81% takes place at the hospital with educated staff (7). The maternal mortality rate is 180 out of 100 000 and the mortality of children before five years of age is 48 out of 1000 births (7,8). Pneumonia, measles, diarrhea and malaria are common diseases that mostly strike children under the age of five and can cause death (7). Malnutrition among children is also common in Namibia (4).

HIV
HIV attacks the human immune system. HIV is transferred through blood, sperm, breast milk and vaginal secretions. The virus attacks the cells in the body that have a specific receptor, known as the CD4-molecule. HIV attaches to this receptor to force itself into the cell. It is mainly the T-helper cell which is a lymphocyte in the immune system that is equipped with this CD4-molecule. That is why HIV attacks these T-
helper cells (2). T-helper cells are one type of lymphocyte that is coordinating the immune system. When the body has low levels of T-helper cells, the immune system cannot work, which means that the body is unable to defeat normal infections. This condition is called AIDS (9).

**HIV-transmission through breastfeeding**

The mothers’ breast milk is suited for their babies and changes in relation to the babies’ needs (4). The babies’ gastrointestinal tract develops quickly when they are breastfed because the breast milk contains IgA antibodies. The IgA antibodies protect the babies from infections in the stomach-intestinal canal and in the airways by protecting the babies’ mucous membrane. (4,10). The breast milk also contains many other active immunologic factors. During the first week there are about 1000-4000 leukocytes/ml in the breast milk, therefore there is a risk of mother to child transmission (MTCT) of HIV(10).

**The risk of mixed feeding for HIV-positive mothers**

Smith et al found that babies who received a mixture of breast milk and replacement food had an increased prevalence of HIV. Breast milk protects the intestinal mucosa which prevents HIV from passing through the intestinal canal into the blood vessels. Replacement foods do not have the protective qualities that breast milk has and can therefore interrupt the intestinal mucosa of the babies. The risk of MTCT of HIV is high if the mucosa is interrupted and the mothers are breastfeeding. HIV is then able to penetrate the mucosa to the blood vessels and then the babies become infected(11). When the babies are a few months their gastrointestinal mucosa is more developed and therefore the risk of HIV-transmission is decreased (11,12).

**Nipple care for HIV-positive mothers**

While breastfeeding exclusively there are some problems that the HIV-positive mothers may experience, like insufficient milk production or engorged breasts. Engorged breasts can lead to mastitis which is an inflammation that can lead to infection. Sore, cracked and bleeding nipples can also occur during breastfeeding. Nurses should inform the HIV-positive mothers that they can continue breastfeeding on the unaffected breast while the affected breast is healing (4).

**HIV-treatment**

To prevent MTCT of HIV antiretroviral drugs (ARV) are provided to both mothers and babies. There are different types of ARV, with Nevirapine being the most used drug for babies in order to prevent MTCT in Namibia. Nevirapine is given to all HIV-exposed children (4). Nevirapine passes into breast milk where it protects the babies from becoming infected with HIV while breastfeeding (13,14).

Nurses shall check all HIV-positive mothers’ CD4-count. All HIV-positive mothers shall receive ARV at 14 weeks of pregnancy. What ARV treatment the mothers receive depends on the mothers CD4-count (4).
Guidelines and policies

**WHO guidelines on HIV and infant feeding**

5-20% of the MTCT of HIV is caused by infant feeding (15). WHO established a new guideline for HIV and infant feeding in 2010 with revised recommendations. WHO together with United Nations Children’s Fund (UNICEF) are providing the countries with guidance in order to assist implementation of the new guidelines (3).

According to the guidelines the first step in prevention of mother to child transmission (PMTCT) of HIV is to identify the pregnant mothers that are HIV-infected. Mothers should be able to take an HIV-test and be counseled on how to prevent transmission of HIV (3).

The national health authorities in each country have to decide if the health services should counsel and support mothers to exclusively breastfeed for six months and receive ARV or to give replacement feeding (3). Replacement feeding reduces the risk of MTCT of HIV but the decision needs to be taken considering if it is AFASS. If it is not AFASS there is an increased child mortality caused by malnutrition and diarrhea which are common childhood diseases (3). It is not recommended to mix breastfeeding and replacement feeding due to the fact that it increases the risk of MTCT of HIV (3,16).

**Recommendations**

The general recommendations from WHO is that HIV-infected mothers should exclusively breastfeed their babies for six months. After six months they should introduce complementary food due to the fact that all babies need complementary food at that age while still continuing to breastfeed for another six months. Breastfeeding should only cease when the babies can be provided nutritionally adequate food. If the mothers decide to stop breastfeeding it should be done gradually and not abruptly (3).

**The Namibian policy on infant feeding and young child nutrition**

Infant feeding in Namibia is a complex issue. 18.8% of the pregnant mothers in Namibia are infected with HIV. The risk of MTCT of HIV is high and serious measures against MTCT of HIV are necessary. Initial breastfeeding is common in Namibia but only 25% continues after three months. Replacement food might be the cause of common childhood diseases and for that reason the government wants to encourage exclusive breastfeeding during the first six months according to the general recommendations from WHO (4).

**Nursing**

The international council of nurses (ICN) is a union of nursing organizations all over the world. Namibia nursing association is one of the organizations that are represented. ICN published the first code of ethic for nurses in 1953. It states that nurses are sharing the responsibility with society to support interventions that help. Preferably nurses should be aware of the weak population’s health and social needs (17).
Nurses in Namibia have a nursing service pledge that includes among others that nurses should promote the well being of clients and their families. They should also treat all clients equally and it should not differ between different social, economical, political, religious or cultural backgrounds. Nurse should respect the client’s humanity, dignity and individuality and also treat the clients with compassion and empathy. They should also maintain a high level of knowledge and skills (18).

Counseling

Nurses should have the ability to inform and educate patients and/or relatives both individually and in group and it is therefore important that nurses have pedagogical skills. It is also important that nurses have knowledge of different pedagogical techniques when they are educating the patients. Nurses should give information in different ways, they can provide the patients with visual information by using information sheets, explain and discuss the information and show procedures to the patients (19).

It is not enough to hand out information, nurses also need to make sure that the patients have absorbed the information (20). Nurses should provide information depending on the patients’ knowledge and needs (21). The patients need to have the ability and motivation to be able to absorb the information (20).

It is nurses’ responsibility to assess and educate patients before they leave the hospital so that they can practice self-care. Dorothea Orem defined self-care as: “The practice of activities that maturing and mature persons initiate and perform, within time frames, on their own behalf in the interests of maintaining life, healthful functioning, continuing personal development and well-being, through meeting known requisites for functional and developmental regulations” (22).

Nurses should also have the ability to offer support and guidance to assure that the patients take part in their own care and treatments (23). Therefore it is essential to give information about adherence to treatment in the patient’s own native language (19). Nurses need to motivate and inform the patients about the importance of adherence to treatment. The patients might not adhere to treatment if there are not enough counseling-sessions or follow-ups (24).

Counseling recommendations in Namibia

In Namibia all nurses are using a specific approach from The Ministry of Health and Social Services to help them counsel mothers about infant feeding. The technique is called the GATHER-approach and is an individual counseling communication technique. It includes education and information to the mothers. “G” stands for Greet clients and reminds the nurses to be friendly, respectful and to give the mothers their full attention. “A” stands for Ask clients about themselves meaning to asking open questions and to listen actively to the mothers while looking into their eyes. When the mothers are expressing their feelings, needs, wants, concerns or questions the nurses should be understanding and show empathy towards them. “T” stands for Tell (inform) the client and allows the nurses to inform the mothers about the advantages of exclusive breastfeeding for the first six months. Other information about infant
feeding options is provided as well. “H” stands for Help and allows the nurses to help the mothers with good positioning and attachment of the babies while breastfeeding. “E” stands for Explain what to do and reminds the nurses to explain to the mothers about the benefits of exclusive breastfeeding for the first six months and to come back for follow-ups with their babies. “R” stands for Return for follow-up when the mothers are coming for follow-up the nurses should ask them if they have any questions or if there have been any problems since their last visit. If the mothers have questions or problems the nurses should give feedback and help them to handle their problems (4).

Questions at Issue
- What is important when nurses provide counseling?
- What obstacles do nurses meet during counseling?

Method

Sampling
The inclusion criteria were that nurses should be willing to participate and be a registered nurse. The nurses should also have been working with PMTCT of HIV for at least two years and be able to speak and understand English well.

To get in contact with the informants the authors contacted UNAM (University of Namibia) and through UNAM we got in contact with the clinical department head at two Antenatal clinics (ANC) at two different hospitals. At one of the hospitals, the PMTCT-clinic was connected to ANC. Nurses working at both ANC and PMTCT-clinic had specific knowledge about PMTCT of HIV. A snowball sampling which is a purposive sampling technique was made in order to recruit informants (25). The authors recruited one nurse through the clinical department head at one of the ANCs. The nurse was willing to participate and had specific knowledge about PMTCT of HIV. New voluntary informants were recruited at both of the ANCs and at the connected PMTCT-clinic with assistance from the first interviewed nurse. Six nurses were recruited, four nurses at ANC and two nurses at the PMTCT-clinic. One of the informants had previously worked at the Post-natal ward and had plenty of knowledge about PMTCT of HIV. Therefore we asked for a contact at the Post-natal ward to recruit new voluntary informants. Two nurses at the Post-natal ward were recruited. A total of eight nurses were recruited (table 1). For practical reasons we decided that we had enough material after eight interviews.

<table>
<thead>
<tr>
<th>Clinic/Ward</th>
<th>Hospital A</th>
<th>Hospital B</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMTCT</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>ANC</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Post-natal</td>
<td>2</td>
<td>-</td>
</tr>
</tbody>
</table>
**Ethical aspects**

Before the nurses made the decision to participate in the study the authors made sure that they were well informed about the aim of the study. We gave all the participating nurses a letter of information (attachment 1). The information was about the aim of the study and the possibility to decline participation during the whole study. They were also informed that all data would be handled confidentially (26).

Permission to conduct the interviews was accomplished through the UNAM. The authors had permission from the Clinical Department Head at both of the hospitals to interview nurses in the maternity section.

**Qualitative interviews**

The authors used a semi-structured interview guide that consisted of five open question areas (table 2) to be able to obtain rich answers from the informants (27). Follow-up questions and probing questions were used to get deeper and more descriptive answers from the informants (28). Examples of questions used were: “Can you tell me more about that?”, “How did you feel at that time?”

<table>
<thead>
<tr>
<th>Table 2 Question areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 General information about PMTCT</td>
</tr>
<tr>
<td>2 Providing counseling to HIV-positive mothers</td>
</tr>
<tr>
<td>3 Giving information about antiretroviral treatments</td>
</tr>
<tr>
<td>4 Obstacles in preventing MTCT of HIV.</td>
</tr>
<tr>
<td>5 PMTCT and Counseling education for the nurse</td>
</tr>
</tbody>
</table>

Both authors were present during all interviews and were responsible for leading four interviews each. We alternated between being responsible for leading the interview and listening and taking notes. At the end of the interview further questions could be asked by the passive author. To make sure the interview guide was sufficient we conducted a pilot interview with one nurse at the ANC at one of the hospitals (27). No changes were made in the interview guide and the pilot interview was included in the study.

To have a quiet room is essential for tape-recording. The only criteria from our side were that the location would be quiet without any disturbances that could interrupt the interview (25). We chose to use a tape-recorder because it is the most accurate way of preserving data. All interviews were tape-recorded and the duration of the interviews was between 20-45 minutes. The most accurate way to preserve interviews is tape-recording. Other advantages of tape-recording is that the researchers can have eye-contact with the informants and can be more observant to changes in the body language (25).

**Content analysis**

Content analysis is a method used in health sciences to analyze texts for example transcriptions of interviews. The authors chose to do a manifest qualitative content
analysis by Graneheim and Lundman because that enabled us to describe what the informants said word-for-word (29). The first step after the data collection was to transcribe the tape-recordings of the interviews (25). After collecting all data the authors transcribed four interviews each after a prearranged guide to make the transcriptions equivalent. We listened and read through all interviews several times to make sure nothing had been left out on the tape-recordings.

All transcriptions were color coded to enable us to track the data. To be able to understand the full meaning of the interviews we read through all transcriptions several times (29).

Based on the aim of the study the authors identified meaning units. Meaning units consists of words, sentences and paragraphs that are linked by their context (29). We compared our identified meaning units and created consensus.

To make the material wieldy the authors condensed the meaning units considering the context. We agreed on a descriptive code for every condensed meaning unit (30). All codes were color coded according to the colors of the transcriptions.

All codes with similar meaning were divided into preliminary categories. No codes were uncategorized. To clarify the categorization the authors created sub-categories. The preliminary categories and their sub-categories were compared and matched against each other. Similar categories and sub-categories were merged (30). No codes could belong to more than one sub-category. To be able to cross-check the data all codes were coded with a number according to their category and sub-category. To complete the findings we compiled all data in one table (table 4). An example of codes that belongs to one subcategory is represented in a table (table 3).

### Table 3 Codes belonging to one subcategory

<table>
<thead>
<tr>
<th>Codes</th>
<th>Subcategory</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informing the mothers on how to administrate Nevirapine to the babies</td>
<td>Educating the mothers about self-care</td>
<td>To give individual counseling</td>
</tr>
<tr>
<td>Informing the mothers that ARV stops the multiplication of HIV</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Informing the mothers that the baby will receive treatment during breastfeeding</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Informing the mothers that it is safe to breastfeed when the baby is on Nevirapine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Informing the mothers about the risk of mixed feeding</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Informing the mothers about side effects to the treatment that the mothers should be aware of</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emphasising on exclusive breastfeeding</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Informing the mothers about replacement feeding</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Informing the mothers about Nipple care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Informing the mothers about safe sex</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Findings

During analysis we found 18 sub-categories and seven categories (table 4).
Table 4 Findings

<table>
<thead>
<tr>
<th>Sub-categories</th>
<th>Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not giving all information at the same time</td>
<td>To give individual counseling</td>
</tr>
<tr>
<td>Educating the mothers about self-care</td>
<td></td>
</tr>
<tr>
<td>Making the information accessible by explaining and showing the mothers</td>
<td></td>
</tr>
<tr>
<td>Giving the mothers information in their own native language</td>
<td></td>
</tr>
<tr>
<td>Being perceptive</td>
<td>To be supportive</td>
</tr>
<tr>
<td>Being aware and able to handle different feelings and reactions</td>
<td></td>
</tr>
<tr>
<td>Motivating the mothers to go for the voluntary HIV-test and counseling</td>
<td>To motivate the mothers</td>
</tr>
<tr>
<td>Motivating the mothers to bring their partner for couple testing and couple counseling</td>
<td></td>
</tr>
<tr>
<td>Motivating the mother to breastfeed exclusively</td>
<td></td>
</tr>
<tr>
<td>Motivating the mothers to take their babies for HIV-testing</td>
<td></td>
</tr>
<tr>
<td>Being aware that mothers lack education</td>
<td>Poverty is an obstacle for the mothers</td>
</tr>
<tr>
<td>Being aware that families lack means</td>
<td></td>
</tr>
<tr>
<td>Being aware that mothers are afraid of disclosing their HIV-status</td>
<td>Stigmatization occurs</td>
</tr>
<tr>
<td>Being aware that women have low status</td>
<td></td>
</tr>
<tr>
<td>Being aware of a non-involvement of men</td>
<td>Cultural differences can have influence on the mothers</td>
</tr>
<tr>
<td>Being aware of cultural beliefs</td>
<td></td>
</tr>
<tr>
<td>Being educated in counseling and PMTCT</td>
<td>To be updated in counseling and PMTCT</td>
</tr>
<tr>
<td>Being aware of the latest information from the Ministry of Health and Social Services</td>
<td></td>
</tr>
</tbody>
</table>

Table 4 describe what nurses think is important and find as obstacles during counseling.

**To give individual counseling**

Nurses find it important to provide individual counseling to make sure that the mothers understand and comply with the information. In order to support and meet mothers’ different demands nurses need to approach mothers individually. It is important that nurses inform mothers several times to enable them to assimilate the information. Individual counseling is provided before and after the voluntary HIV-test. The HIV-positive mothers are also provided several follow ups and are given individual counseling about ARV and infant feeding.

It is important that mothers are educated in self-care during group counseling and individual counseling. All mothers receive information about infant feeding options, safe sex and the importance of being sexually fateful to one partner. It is also important not to forget that HIV-negative mothers also need information about retesting and information about measures on how to remain HIV-negative. Nurses emphasize safe sex to the HIV-positive mothers due to the risk of being re-infected. It is an increased risk of transmitting HIV to the babies when the mothers are re-infected. Nurses also emphasize nipple care due to the risk of transmitting HIV to the babies through bleeding or infected nipples.
“We teach them the right attachment and how to release the nipple from the sucking baby... That is the way how we can prevent cracked nipples, which can also end up in bleeding nipples which also is a risk factor of HIV-transmission” (Informant 3)

Information about different ARV is provided to the mothers. Nurses inform the mothers about the importance of adhering to treatment and about common side effects. It is also important to show some procedures to make the information easy to understand for the mothers. During ARV-counseling nurses show the mothers how to administrate the medicine to their babies. Nurses also show the mothers the right attachment during breastfeeding to prevent cracked nipples.

“We are teaching them with a syringe, we scratch the syringe up to that certain level that they must give...We give them a chance to do the first round here in front of us so we can see that they are doing the right thing” (Informant 5)

There are many different native languages in Namibia and not all mothers understand English. Communication is important during counseling. Not all nurses can speak the different native languages and this creates a barrier between mothers and nurses. Nurses divide the mothers into different groups and provide counseling in the mothers’ native languages to make sure that the mothers understand the information. But sometimes when there is no one at the clinic who can speak the mothers’ native language nurses get frustrated.

“If there is no one to translate you just give a little bit but you still feel that there was much more that I could have given, so at the end of the day still a disadvantage of the women and a frustration for the staff members” (Informant 2)

To be supportive
It is important that nurses listen to the mothers and are able to pick up different reactions and feelings. During counseling nurses need to be empathetic, comforting, perceptive and be aware of the mothers body language. It is important to give information at the right time. The mothers are usually alone when they come for counseling. When nurses give the mothers an HIV-positive test result they have to handle the information on their own. Therefore it is important that nurses give the mothers power and time to deal with the information. Nurses have to be able to pick up if or when the mothers are ready to receive their HIV-test result. Receiving an HIV-test result can be difficult for the mothers and therefore nurses have to be professional and support the mothers. It is not appropriate to give infant feeding counseling immediately after giving the mothers the HIV-test result.

“You do not approach each and every mother the same, you must first look, how is the mother? Sometimes her body will tell you that you must not ask me questions and other mothers are open” (Informant 8)

Common feelings that nurses meet after a positive HIV-test are anger, worry, fear and shock. Some mothers blame their partners for being infected and others expect
the result. Some mothers expect to be HIV-positive and become shocked when they learn that they are HIV-negative. Mothers who cannot afford replacement feeding are concerned that they will transmit the virus to their babies. Nurses can refer the mothers to social workers and support groups where they can receive replacement feeding.

Mothers who already know their HIV-status are more prepared when they give birth. They are more prepared emotionally and have social support from their partners and families. Therefore it is easier for them to adhere to treatment and go for follow-ups. It is important that nurses are aware of these feelings and reactions in order to be able to support the mothers during counseling.

“Even if she opted for breast feeding still she is worried...Some are worried because the want to do the replacement feeding but they can not afford it...I can see the worry in her eyes and then I have to comfort her” (Informant 3)

To motivate the mothers

It is important to motivate the mothers to comply with the information given during counseling. It is the nurse’s responsibility to motivate the mothers to go for voluntary HIV-test and counseling. Nurses inform the mothers about the advantages of HIV-testing and that the PMTCT-program is helping. The information to mothers is on how HIV can be transmitted to the babies and that by taking an HIV-test the mothers can protect their babies. Nurses also inform the mothers that knowing your HIV-status is the best thing. More counseling is provided to mothers who decide not to take the HIV-test. HIV-negative mothers are educated on how to remain HIV-negative by practicing safe sex. If the mothers are HIV-positive nurses informs the mothers how to live with HIV. Nurses provide the HIV-positive mothers with treatment and check-ups.

“I concentrate on the benefits of being tested...I know it is difficult for them...but they want to protect their babies ...It is just a natural instinct the moment they know it is about their babies, they go for the test.” (Informant 2)

It is important that nurses motivate the mothers to bring their partners to the voluntary HIV-test and counseling. Partner involvement makes it easier for the mothers to have an open conversation about the information given at the clinic. Therefore it is important that the partners get tested for HIV. If the partners test HIV-positive nurses can inform both of the couple about the risk of reinfecting the mothers.

“If they get infected while they are pregnant the risk of the baby getting infected at that time is very high because of the HIV-virus from recently infection so the viral load is on its peak.”(Informant 7)

Nurses motivate the HIV-positive mothers to choose exclusive breastfeeding for six months. They inform the mothers about the content of the breast milk and the advantages of giving breast milk. Breast milk contains all the nutrients that the
babies need, it is convenient for the mothers because it is always there, it has the right temperature and it is free. Nurses emphasize on no mixed feeding for the first six months, not even giving extra water to the babies as mixed feeding increases the risk of MTCT of HIV. Nurses inform the mothers’ to start with complementary food after six months. The mothers are provided ARV for their babies as long as they are breastfeeding. Mothers that are on HAART only need to give ARV to their babies for six weeks.

“Mixing food complicates things because it damages the mucosa of the small intestine so the virus will go into the bloodstream...We encourage them to stick to one choice, no water no nothing, breast milk has everything, it is easy to prepare and everyone can afford it.” (Informant 1)

Nurses emphasize the importance of testing the babies for HIV after six weeks. The babies are tested for HIV twice more within the first year. If the babies are tested HIV-negative during the last HIV-test there is no need to continue with the babies’ ARV-treatment.

Poverty is an obstacle for the mothers

Poverty in the community is something that nurses have to be aware of and deal with every day. Not all mothers have a primary education and it can therefore be difficult for nurses to make mothers understand the information. It is important that the mothers know how HIV can be transmitted so that the mothers can protect themselves and their babies. Not all mothers are able to read and because of that it can be hard for mothers to follow the instructions for preparing replacement feeding. Being aware of this obstacle is important because then nurses can adjust the information so that the mothers can understand.

“They do not follow instructions on how to prepare the replacement feeding safe for the baby...She tries to economize the milk so that it can stretch a bit longer...The risk makes it better to breastfeed” (Informant 1)

Some mothers do not have the means to buy and prepare replacement food for their babies and not all mothers have access to clean water, hence nurses emphasize on exclusive breastfeeding. But it is the mothers’ choice so if the mothers can afford replacement feeding nurses will provide them with information about it. Some mothers have to work and can therefore not breastfeed exclusively.

The working mothers might not be allowed to go for follow-ups and for some mothers the distance to the clinic is too far. It is important that nurses adapt the information to the mothers living conditions.

“The mother can give replacement feeding if she can sustain and afford it, it’s her decision...The ones who can not afford replacement feeding are concerned” (Informant 1)
Stigmatization occurs
Stigmatization in the community is something that nurses have to be aware of and deal with every day. People in the community link PMTCT-clinic with HIV-positive mothers.

“It is really stigmatization, everyone wonders: what are you doing at the PMTCT-side of the ANC, people have already linked that either you are positive or what are you doing at the other side...There is so much eyes on you...It is a big step going to that side” (Informant 2)

Some mothers are afraid to be discriminated against by others and some are afraid of losing their relationship and choose not to go to the PMTCT-clinic. It is important that nurses inform the mothers that not all mothers coming to PMTCT-clinic are HIV-positive. Some mothers do not disclose their HIV status to their partners and families because of fear of stigmatization. It is important that nurses emphasize that mothers should disclose their status to their partners. If there is no openness in the relationship the mothers might not adhere to treatment or the feeding counseling.

“We are having an issue of disclosure, they do not want to disclose, that is a problem for the family because the mother will end up not giving the medication to the baby because she did not disclose.” (Informant 4)

Cultural differences can have influence on the mothers
Cultural differences in the community are something that nurses have to be aware of and deal with every day. In some cultures women are powerless and depend on their partners. Talking about sex related issues, pregnancy and HIV can be taboo. That is the reason why some mothers do not inform their partners about the couple testing and PMTCT-counseling. Some mothers are afraid of being hit, left or blamed by their partners which also frighten some mothers of disclosing their status to their partners.

“The man is the boss and you do not go and tell the man you must come to the clinic and go for the testing, some women are afraid, it is according to their culture that the women does not go and tell a man those things” (Informant 8)

Due to gender roles and because it is common for them to have multiple partners, few men are tested. Partners are afraid of meeting a lover at the hospital. Men are not involved in the PMTCT-counseling during the pregnancy of their partner, as it is treated as a women’s issue. This creates a barrier between mothers and their partners of having an open conversation about PMTCT of HIV. There is also a belief among men that if their partners are HIV-negative so are they. This belief creates an obstacle for nurses to convince men to come for HIV-testing. It is important that nurses adapt the information to the different cultures.

“The obstacle is the non-involvement of the partners....women....don’t usually discuss their sexual orientation or issues like HIV-testing.” (informant 1)
There are many cultures in Namibia as well as many different traditions when it comes to infant feeding and sex. Some cultures believe that babies need extra water, otherwise the babies will be constipated. This creates a problem for nurses when they give counseling about exclusive breastfeeding.

**To be updated in counseling and PMTCT**

As a nurse it is important to be updated in PMTCT-counseling to be able to meet the demands from mothers. Nurses also have a responsibility to search for new knowledge to be able to provide evidence-based nursing. Nurses think it is important that all nurses are trained in counseling and PMTCT of HIV. Nurses also expressed that it is important that workshops are be provided to implement the guidelines in the maternity section. Some nurses thought that they did not have enough information to be able to counsel the mothers about PMTCT of HIV. How much and when nurses received the information depended on where they worked in the maternity section.

“*I do not think I have all the information about PMTCT because things are changing all the time but I think that I have the basics...It does not come to us at Post-natal ward first, it comes to the PMTCT-side and when they start new things they include us.*” (Informant 6)

Nurses think it is important to recieve updated guidelines about PMTCT of HIV and infant feeding from The Ministry of Health and Social Services. All nurses have basic knowledge of counseling and PMTCT of HIV. They also expressed that they have a responsibility to be updated in recent research and in new information from the Ministry of Health and Social Services. The nurses also think it is important that The Ministry of Health and Social Services provide the population in Namibia with information about PMTCT and couple testing through radio, billboards and internet.

**Discussion of method**

In Namibia it is common with private hospitals. There are also several small clinics in Namibia working with pregnant mothers and PMTCT-issues. The clinics are placed in the communities to support and refer the mothers to the hospitals if necessary. The authors had no possibility to get in touch with any of the private hospitals or small clinics since UNAM is not cooperating with any of them. We believe that the findings might have been different if any of the private hospitals or clinics would have been included. There are many poor people in Namibia, who might not afford to go to private hospitals. Private hospitals have more resources and we do not think that they have the same amount of mothers who need PMTCT-counseling.

During sampling we did not want to include any nurses that recently passed their examination because clinical work experience is important in order to be able to answer the interviews’ question areas. We believed that our question areas would help us to achieve the aim of the study. After the pilot interview we felt more certain that these question areas would suffice. The question areas gave us descriptive answers to analyze. Other question areas might not have given us the descriptive answers that we received.
The maternity section consists of ANC, PMTCT-clinic, Post-natal ward, Labour ward and Premature ward. By using snowball sampling we did not make any contacts at the Labour ward and this ward was not included. The mothers stay at the Labour ward is short. We believe that the nurses there do not practice PMTCT-counseling. We got a contact at the premature ward but the nurses there were not interested in participating in the study. We do not think that the exclusion of the two wards had any effect on the findings since all nurses should have the same knowledge about PMTCT-counseling.

By using snowball sampling there is a risk that the respondents share the same point of view (25). We do not think that it is an issue because our respondents came from different clinics and different cultures and they gave us a wide material.

There are different kinds of sampling techniques. The authors could have chosen to do a homogenous sampling but did not. We believed that using two different state hospitals and four different clinics/wards gave the study a wider perspective. A homogenous sampling means that informants with specific knowledge, e.g. all nurses working at ANC, would be included (25).

If the data is collected during a long period of time there is a risk that the interviews will be inconsistent. We wanted the interviews to be comparable, we collected all data within three weeks and transcribed four interviews each shortly after the data collection (29). All interviews contained the same amount of useful material which confirms that the material was comparable (25).

We chose to conduct interviews for data collection because we wanted to describe nurses’ point of view. We could have put together a questionnaire study, but we wanted the nurses to be able to elaborate their answers (25). During the interviews we were able to use probing- and follow-up questions. By using this technique we received rich answers from the informants. The informants developed their answers and that resulted in a deeper understanding for the authors. The risk of conducting interviews for data collection is that the interviewers may involve their own feelings and attitudes which can affect the findings (31). Since none of the authors were familiar with PMTCT of HIV, we do not think that the interviews were limited. We rather think that because of our limited knowledge of PMTCT of HIV we acted open-mindedly and asked the informants to elaborate their answers frequently.

To be two interviewers can strengthen the study if they are interacting well together, the interview will normally be improved and a wider range of information can be collected (27). Since both authors were present during the interviews the informant might have felt at a disadvantage. Therefore it is important to make sure that the informant is comfortable during the whole interview. One way to reduce the feeling of disadvantage of the informant is to let the informant select the location for the interview (27). We believe that we had a good connection with the informants and that they were comfortable during the whole interview. All informants were open-minded and they provided us with a wide material.

Almost all nurses chose to be interviewed in an office at the ward. There were no disruptions during the interviews. We believe that if there would have been a
disturbance during the interviews, it would have had a negative effect on our findings. That there were no disruptions made it easier for the informants to elaborate their answers. During transcription we could hear the nurses’ answers clearly.

That none of the authors were native English speakers could be a weakness of the study. We do not think that the language barriers had an effect on the result since both authors speak and understand English well. We were aware that English is the official language in Namibia even though different cultural languages are more frequently spoken. Therefore we made sure that the nurses could speak and understand English well. All participating nurses could understand and speak English well. There were no language barriers during the interviews.

When the informants are self-selected the communication between the researchers and the informants is improved because the conversation becomes more open (25). Too many interviews can make the material unmanageable (27). A smaller quantity of interviews enables the researchers to find a deeper meaning in the interviews (25).

The manifest result might have been affected since no one of the authors were familiar with performing a content analysis. To ensure that the result was trustworthy the authors followed the method described by Graneheim and Lundman. The authors have described the data collection and analysis carefully, which gives the reader an opportunity to judge the validity of the study. We chose to present quotes in the result which also strengthens the validity as well (30).

Within qualitative research the concepts to describe trustworthiness is credibility, reliability and transferability. The trustworthiness is reflected in how well the data has been collected and analyzed (29). The authors chose nurses that could answer the aim of the study to create high credibility. Another aspect of credibility is that the meaning units should not be too broad or too narrow (29). We have identified meaning units accordingly.

Reliability is also an aspect of trustworthiness. The authors conducted the data collection during a total of four weeks. The same question areas were used for all informants (29). Both authors have read through all transcriptions and cooperated during the analysis. These factors strengthen the reliability of the study (30).

The last concept to describe trustworthiness is transferability. If the material is transferable it is possible to use to result in different situations. However only the reader can decide if the material is transferable or not (29).

Discussion of findings
We found that nurses have to deal with many different feelings. Being able to handle these feelings is important because nurses want mothers to feel comfortable during counseling. Therefore nurses need to be able to read the mothers body language and be empathetic. Leshabari found in a study made in Tanzania that mothers need to be receptive to be able to take in the information that is provided by nurses (32). de Paoli et al described in a study made in Tanzania that it is important for nurses to be self-sacrificing, nonjudgmental, understanding, sensitive and supportive (33).
We have found that it is important for nurses to provide information about self-care to mothers, to be able to practice self-care mothers need to be educated (22). To be able to educate the mothers nurses need to have pedagogical skills (19). It is also important that nurses adapt the information to the mothers’ different demands (21). We have found that it is important that nurses explain things clearly and show different procedures to the mothers. Nurses need to ensure that the mothers understand the information given during counseling. Nurses are giving the mothers the possibility to administrate ARV to their babies at the clinic to make the mothers feel secure. Nurses also show the mothers the right attachment to their babies because it is important in order to prevent cracked nipples. Kuhn et al confirms in a study made in Zambia that counseling about attachment to the babies during breastfeeding reduces the risk of cracked nipples and infections (12).

We have found that nurses think it is important that the mothers get to decide on whether to breastfeed exclusively or to give replacement feeding. To be able to make that decision the mothers need support and information several times. Chisenga et al found in a study made in Zambia that counselors decided which feeding option the mothers should practice instead of giving them a choice. (34).

Nurses in Namibia counsel according to the GATHER-approach and we think that this approach influences nurses in a good way and that it is beneficial for the mothers. GATHER enables nurses to have an open conversation with mothers and we believe that the way nurses act when they meet HIV-positive mothers that come for PMTCT-counseling is crucial. We think that it is more likely that the mothers will be receptive if nurses are empathetic and supportive, if the mothers are not receptive they might not be able to absorb the information. We believe that providing information in more than one way is very important since different people assimilate information in different ways. Nurses have to make sure that the mothers have understood the information if they want the mothers to adhere. We think that asking counter-questions is one way to ensure that the mothers have understood the information (19). We think nurses should respect the mothers’ right to make their own decision. When mothers do not get the opportunity to choose infant feeding method they might feel neglected, which might result in that mothers do not adhere to counseling or come for follow-ups.

We have found that providing information in the mothers’ native languages is crucial. If the mothers do not understand they will not adhere to treatment or counseling. When there are no resources at the clinic to help nurses with translation it is a disadvantage for the mothers. Hofstede and Sokol described that using a second language can affect the communication. The meaning of words can vary, so even if the mothers can understand basic English they might not understand the information (35,36). We believe that it is important that nurses and mothers can speak the same language. In Namibia, English has recently been declared the official language. The older generations are not educated in English but today all children receive their education in English. We believe that in the future most of the population will be able to speak English and this problem will disappear.

We found that the mothers are informed about the opportunity to test their babies for HIV thrice and that most of them show up for the tests. Peltzer et al found in a study made in South Africa that many mothers did not bring their babies for HIV-testing
for many reasons, such as not wanting their babies to be tested or having partners refusing an HIV-test. The timing of the HIV-test and ignorance among partners were also reasons for not testing their babies (37). We believe that the reason why we have found that most mothers come with babies for HIV-testing might be that they are informed several times. Nurses make sure that the mothers understand the benefits of testing their babies for HIV. We believe that testing the babies for HIV is a good possibility for the mothers and that it can reduce the mothers’ concerns if their babies are HIV-negative. We also believe that it can be stressful for the mothers going for an HIV-test with their babies. Still we think that the benefits of taking their babies for HIV-testing outweigh not knowing their babies HIV-status.

We have found that nurses offer mothers to bring their partners for HIV-testing and counseling but the partners are not coming because of gender roles and multiple partners. Another reason is that some men believe that if their partners are HIV-negative so are they and therefore they will not go for the HIV-testing. Faihes et al found in a study made in Tanzania that there were many reasons why the mothers did not bring their partners to PMTCT-clinic. Gender roles is one issue, women are not supposed to tell a man what he should do. (38).

We found that adherence to treatment and infant feeding counseling can be an issue when the mothers did not disclose their HIV-status to their partners and families. Mothers who choose exclusive breastfeeding might have problems adhering to their feeding option if they do not disclose their HIV-status to their families. It is general knowledge that HIV-positive mothers have to choose exclusive breastfeeding and therefore their families might suspect their HIV-status. Mothers are afraid of stigmatization and reactions from partners and families. Buskens et al found in a study made in southern Africa that infant feeding is viewed as a women’s issue but when the mothers did not follow the norm of mixed feeding their partners and families wanted to know why (39). We have also found that mothers are afraid of disclosing their HIV-status to their partners for many reasons. Since women have a low status in society they depend on their partners both economically and socially. The mothers are afraid of their partners’ reactions to their HIV-status. They fear being left, blamed or hit. Farquhar found in a study made in Kenya that the most significant barrier for the mothers to disclose their HIV-status was fear of how their partners would react (40) Other studies made in Africa have found that mothers fear being physically abused (38,39,41,42). They are also afraid of being verbally abused and being discriminated due to stigmatization in the communities (16,34,42). The mothers fear that their partners will leave them because then they will lose their income and security (34,39,41).

We have found that partner involvement makes it easier for the mothers to disclose their HIV-status. If they do not disclose their HIV-status they might have problems adhering to treatment and infant feeding counseling. It is easier if both mothers and their partners are present during counseling about PMTCT of HIV. When the partners are involved it enables an open conversation in the relationship. Other studies made in Africa have also found that partner involvement increases adherence to treatment and feeding options, use of condoms, attendance for follow-ups (34,38,40). We believe that ignorance among partners can be handled by providing education about sex and HIV-transmission.
We think that the issues of stigmatization and mothers not disclosing to their partners and families is caused by gender roles. Nurses can only support and inform the mothers about the benefits of disclosing their HIV-status to their partners and families. That partners are not coming for HIV-testing is also due to gender roles. We realize that it does not matter if nurses inform the mothers about PMTCT of HIV and couple testing when the mothers are not allowed to tell their partners what to do. This is one of the biggest problems for nurses working with PMTCT of HIV. Still, nurses are aware of the fact that partners are not involved but they cannot change the gender roles. The Ministry of Health and Social Services are working with these issues by advertising on billboards, radio and internet. We believe that this is crucial in the work of preventing MTCT of HIV. We also think that the information from the Ministry of Health and Social Services can increase the public knowledge about HIV-issues. We believe that an increased knowledge about HIV can reduce stigmatization in the communities.

We found that nurses emphasize on exclusive breastfeeding and no mixed feeding for babies younger than six months. Kuhn et al show in a study made in Zambia that mothers who mix feeding have more than a threefold increased risk of MTCT of HIV. Mothers who breastfeed exclusively for four months have a 50% less risk of transmitting HIV to their babies than mothers who mix feeding. As the babies get older the risk of transmitting HIV to the babies becomes smaller (12). Chisenga et al found in a study made in Zambia that different factors that influence the mothers’ choice on whether to breastfeed or give replacement food. The factors were cost of the replacement food, difficulties to maintain their feeding choice and influences from relatives and nurses (34). In developing countries the possibility for HIV-positive mothers to give replacement food depends on if it is safe (3). We think that it is good that there is an efficient way to reduce the risk of MTCT of HIV while ensuring good nutritional status for mothers and their babies in developing countries.

We found that many mothers lack adequate education and many mothers are analphabetic and it can thus be problematic for these mothers to prepare replacement food. Nurses are aware of these issues and provide the mothers with adequate information. Some mothers do not have access to clean water and might not have the possibility to prepare replacement food safely for their babies. Nurses think it is important to inform these mothers about the risk of giving replacement food when it is not safe. Becquet et al found in a study made in Côte d'Ivoire that mothers that choose exclusive breastfeeding are less likely to have the means to prepare replacement food safe for their babies. Mothers that choose replacement feeding have a higher educational level and better socioeconomical status (43).

We found that exclusive breastfeeding in combination with ARV is working and that fewer babies are infected with HIV. Nurses think it is important that all HIV-positive mothers and their babies receive the proper ARV-treatment during pregnancy and while breastfeeding in order to reduce the risk of HIV-transmission. ARV is provided by the Ministry of Health and Social Services. The mothers’ CD4-count determines what ARV-treatment the mothers should receive. If the mothers receive HAART there is no need to administer ARV to the babies after six weeks (4). We found that there are many different cultures in Namibia and it is important that nurses are aware of the different cultures and their beliefs. One issue is that the HIV-positive mothers give extra water to their babies because they believe that it prevents constipation.
Therefore nurses think that it is important to inform the mothers about the risk of MTCT of HIV when giving extra water. Buskens et al found the same problem about giving extra water to the babies (39).

We believe that the different cultures make nurses’ work more complex and challenging. Nurses have to provide different counseling depending on the mothers’ culture. We think that nurses are handling this problem well by having knowledge of the differences in the cultures. We also think it is important that nurses find out what the mothers’ socioeconomic status is and if the mothers are able to read and follow instructions on how to prepare replacement food. Some mothers feel that they are forced to choose exclusive breastfeeding because they do not have the means to buy and prepare replacement food for their babies. Nurses should also try to find out why mothers mix and find ways to keep mothers from mixing. Nurses try to help mothers who want to give replacement food even though they cannot afford to buy it. Nurses refer the mothers to social workers and support groups that can provide them with replacement food. According to ICN, it is nurses’ responsibility to support and help the weak population in particular (17). We believe that nurses are doing the right thing by referring the mothers to social workers. It is good that nurses are using available resources and we think that it enables the mothers to make an informed decision about infant feeding options. We also think that the Ministry of Health and Social Services is doing the right thing by providing ARV free of charge to all HIV-positive mothers and their babies. It enables the mothers who cannot afford replacement food to provide their babies with adequate food without risking MTCT of HIV.

We found that nurses think it is important to be updated on both counseling and PMTCT of HIV. Nurses have their own responsibility to find recent research and information from the Ministry of Health and Social Services. Some nurses express that they do not get enough information from the Ministry of Health and Social Services. Chisenga et al found that without training in counseling, the information about infant feeding to the mothers will not be enough. Infant feeding counselors have to be updated on the latest research to be able to provide evidence-based knowledge (34). We believe that it is extremely important to be updated to be able to counsel mothers about infant feeding and PMTCT of HIV. If nurses at ANC are not updated in PMTCT of HIV and infant feeding counseling they might not find mothers that need to be referred to PMTCT-clinic.

We believe that nurses and nursing students in Namibia can benefit from this bachelors thesis. Our findings describe what nurses in Namibia think is important during PMTCT-counseling. We think that our findings show what knowledge nurses possess and also the obstacles that nurses encounter in their work of preventing MTCT of HIV. Nursing students could benefit from our findings by discussing obstacles and possible solutions to them.

Research about HIV and MTCT of HIV is necessary as long as there is a high prevalence of HIV in the world. Recommendations on PMTCT of HIV are changing because new research finds new methods to prevent MTCT of HIV (3). We think a major change can occur when more men are involved in PMTCT of HIV. The area is highly researched but change requires time. We believe that research on how to bring more men to the PMTCT-clinics is necessary. We realize that cultural beliefs and
gender roles is a large part of the problem. Therefore we believe that getting men more involved will take time. Another interesting aspect is the mother’s experience of PMTCT-counseling. We have found that nurses in Namibia think that having pedagogical skills is important. But do the mothers experience that they are pedagogical? Nurses also talked about obstacles for the mothers. It would be interesting to know if the mothers’ experience the same obstacles. This could be issues for future studies.

**Conclusion**

It is important that nurses are updated in PMTCT-counseling in order to provide mothers with the correct information in a pedagogical way. Nurses need to be aware of obstacles for the mothers and their families to be able to meet their different demands. Men are not involved in PMTCT-counseling and nurses think that partner involvement would benefit PMTCT of HIV.
References


Attachment 1

University of Linköping, Sweden
Faculty of Health Sciences
Nursing programme 180 ECTS

To the respondent

The aim of this study is to describe how nurses work to prevent mother to child transmission of HIV through breastfeeding. Our main issue is to find out how nurses give information about breastfeeding choices to mothers.

As HIV is a big problem in Namibia nurses are familiar with these issues. A total of 15.3 % of the adult population are HIV-positive or carriers of AIDS. This is one of the highest numbers in the world. Therefore we want to do our bachelor thesis about mother to child transmission of HIV in Namibia.

We are interested in interviewing nurses working at the PMTCT-clinic with these issues. We believe that interviewing these nurses will help us towards answering the aim of our study.

Participation in this study is voluntary and anonymous and the respondent can decline participation during the whole study. All collected data will be handled confidentially and the recordings will be destroyed after presentation of the thesis at Linköping University.

Are there any questions or uncertainties about this study, do not hesitate to contact us.

Jennie Lundkvist
Student
jenlu850@student.liu.se

Emma Staflin
Student
emms043@student.liu.se

Eva Molander
University lecturer
eva.molander@liu.se