COMPARISON OF SELF-CARE BEHAVIOR BETWEEN HIV/ AIDS INFECTED AND NON-INFECTED MOTHERS

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A Thesis Submitted in Partial Fulfillment of the Requirements
for the Degree of Master of Public Health Program in Public Health
College of Public Health Sciences
Chulalongkorn University
Academic Year 2010

การเปรียบเทียบพฤติกรรมการดูแลตนเองระหว่างมารดาที่ติดเชื้อเอช ไอ วี/เอดส์ และไม่ติดเชื้อเอช ไอ วี/เอดส์

นางนงลักษณ์ คำสวาสดิ์

วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาสาธารณสุขศาสตร์มหาบัณฑิต
สาขาวิชาสาธารณสุขศาสตร์ วิทยาลัยวิทยาศาสตร์สาธารณสุข
จุฬาลงกรณ์มหาวิทยาลัย
ปีการศึกษา 2553

Thesis Title	COMPARISON OF SELF-CARE BEHAVIOR BETWEEN HIV/ AIDS INFECTED AND NON-INFECTED MOTHERS
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Field of Study	Public Health
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นงลักษณ์ คำสวาสดิ์ : การเปรียบเทียบพฤติกรรมการดูแลตนเองระหว่างมารดาที่ติดเชื้อเอช ไอ วี/เอดส์และไม่ติดเชื้อเอช ไอ วี/เอดส์. (COMPARISON OF SELF-CARE BEHAVIOR BETWEEN HIV/ AIDS INFECTED AND NON-INFECTED MOTHERS) อ. ที่ปรึกษาวิทยานิพนธ์หลัก : ดร.อุษณีย์ พึ่งปาน, 81 หน้า.

การวิจัยครั้งนี้เป็นการวิจัยเชิงคุณภาพ มีวัตถุประสงค์เพื่อเปรียบเทียบพฤติกรรมการดูแลตนเองระหว่างมารดาที่ติดเชื้อเอช ไอ วี/เอดส์และไม่ติดเชื้อเอช ไอ วี/เอดส์ ตามกรอบแนวคิดการดูแลตนเองของโอเรม 6 ด้านใช้วิธีการสัมภาษณ์ ผู้ให้ข้อมูลกลุ่มศึกษาคือมารดาหลังคลอดที่คิดเชื้อเอช ไอ วี/เอดส์ จำนวน 8 คนและกลุ่มเปรียบเทียบคือมารดาหลังคลอดที่ไม่ติดเชื้อเอช ไอ วี/เอดส์ จำนวน 8 คน มารับบริการหลังคลอดในโรงพยาบาลร้อยเอ็ด จังหวัดร้อยเอ็ด ระหว่างเดือนมีนาคม ปี พ.ศ. 2554 ถึงเดือนเมษายน ปี พ.ศ. 2554

ผลการวิจัยพบว่า พฤติกรรมการดูแลตนเองด้านที่1 อาหาร น้ำและอากาศ ทั้ง 2 กลุ่มการรับประทานอาหารครบทั้ง 5 หมู่ กลุ่มที่ติดเชื้อเอช ไอ วี/เอดส์ งดอาหารหมักดองชากาแฟ กลุ่มไม่ติดเชื้อเอช ไอ วี/เอดส์งดอาหารไขมัน รสหวาน งดปลาร้า ด้านที่2 การขับถ่ายไม่มีปัญหาท้องผูกและการขับถ่ายปัสสาวะ มีความแตกต่างเรื่องสีอุจจาระพบว่ากลุ่มติดเชื้อเอช ไอ วี/เอดส์อุจจาระเป็นสีดำในช่วงรับประทานยาต้านไวรัส (AZT) ด้านที่ 3 การมีกิจกรรมและการพักผ่อน ทั้ง 2 กลุ่มไม่แตกต่างกัน ด้านที่ 4 ความสันโดษและการเข้าสังคม กลุ่มติดเชื้อเอช ไอ วี/เอดส์ลักษณะครอบครัวเดี่ยวมากกว่าครอบครัวขยาย สัมพันธภาพในครอบครัวกลุ่มติดเชื้อเอช ไอ วี/เอดส์มีทะเลาะกันบ้างส่วนกลุ่มไม่ติดเชื้อเอช ไอ วี/เอดส์มีสัมพันธภาพที่ดี บุคคลที่ช่วยเลี้ยงลูกเป็นคนในครอบครัวช่วยเหมือนกัน การร่วมกิจกรรมของชุมชน กลุ่มติดเชื้อเอช ไอ วี/เอดส์เข้าร่วมกิจกรรมมากกว่าโดยการช่วยพัฒนาชุมชน ด้านที่ 5 การป้องกันอันตรายต่อชีวิตและสุขภาพ กลุ่มติดเชื้อเอช ไอ วี/เอดส์เลี้ยงลูกด้วยนมผสม กลุ่มไม่ติดเชื้อเอช ไอ วี/เอดส์เลี้ยงลูกด้วยนมแม่ทุกคนและให้อาหารเสริมร่วมก่อนลูกอายุครบ 6 เดือน ด้านที่ 6 การดำรงชีวิตอย่างปกติสุข กลุ่มติดเชื้อเอช ไอ วี/เอดส์กังวลใจเรื่องการติดเชื้อแต่พึงพอใจในชีวิต ทั้ง 2 กลุ่มผลตรวจหลังคลอดปกติและไม่ได้นัดตรวจหลังคลอดอีก

ทั้งสองกลุ่มมีพฤติกรรมการดูแลตนเองแตกต่างกันในด้านที่ 1,2,4,5,6

สาขาวิชา สาธารณสุขศาสตร์.....ลายมือชื่อนิสิต.....

ปีการศึกษา 2553..... ลายมือชื่อ อ.ที่ปรึกษาวิทยานิพนธ์หลัก.....

5279134153 : MAJOR PUBLIC HEALTH
KEYWORDS : MOTHERS / SELF- CARE / HIV/ AIDS - INFECTED MOTHERS / THE POSTPARTUM PROCEDURCS OF MOTHERS
NONGLAK KHAMSAWARDE : COMPARISON OF SELF-CARE BEHAVIOR BETWEEN HIV/ AIDS INFECTED AND NON-INFECTED MOTHERS. ADVISOR : USANEYA PERNGPARN, Ph.D., 81 pp.

The objective of the qualitative research was to study the comparison of self-care behavior between HIV/ AIDS inspected and non-infected mothers. The study was conducted by interviewing data of the 6 aspects of self-care behavior under Orem's self-care framework. The research's case study includes the eight HIV/AIDS- infected postpartum mothers versus the HIV/AIDS- non infected mothers who received the postpartum services during March- April 2011 at Roi-Et Hospital.

The research results found that the self-care behavior of aspect 1, All informants attempted to take care themselves properly by having complete five nutrients, abstaining from fermented food, tea, coffee, fat food, soda and sweet food which would make them fat, additionally, fermented fish which could cause itchy at the wound from Caesarean section was not allowed as well. In aspect 2 The findings showed that all informants didn't have any constipation and urination problems. One of the HIV-infected informants excreted 1-3 times a day; the feces turned black during the AZT (Azidothyrnidine) - antiviral medication. Aspect 3, activity and rest, both groups were not different. Aspect 4 Solitude and Social interaction showed that most of the infected informants were from nuclear families rather than extended families. Due to their belief that being an HIV/AIDS-infected patient was considered as their own and family's stigma, they wanted to conceal the truth about their infection. they participated in community's activities; they did such folding paper birds, doing some pieces of work for festivals and participating in their community development trainings and helping their community development in cleaning. Aspect 5 prevention of hazard, the HIV/AIDS-infected informants fed their babies with the formula milk, the non-infected informants did breastfeed their babies with breast milk even some could not continue breastfeed until six months. Aspect 6, promotion of normality, both groups were satisfied with their lives but some anxieties were found among the HIV/AIDS-infected group. Both groups were normal after follow up.

The difference between those two groups were aspect 1,2,4,5,6

Department : Public health
Field of Study : Reproductive health
Academic Year : 2010

Student's Signature Nongl Kham
Advisor's Signature USaneya Perngparn

Acknowledgements

I would like to thank the following people who so willingly supported me until the research was achieved:

- Dr. Usaneya Perngparn,Ph.D.,my Research Adviser, for the unwavering guidance;
- Associate Professor Sathirakorn Pongphanich,M.A.,Ph.D., the Chairman of the Research Committee;
- Dr. Alessio Panza M.D.,M.P.H. and Assistant Professor Manopchia Thamkhantho, members of the Research Committee, for the invaluable councelling on the research;
- The officers of postpartum ward, Breastfeeding clinic, Gynecology clinic and Social Work at Roi Et Hospital, Roi Et Province, for the assistances of instrument monitoring and data collection;
- All of the key informants, for the interview data;
- And, last but not least, my thanks go to the proponents' family as well as instructors of College of Public Health Science, Chulalongkorn University, for the ongoing moral, emotional and knowledgeable support.

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LIST OF ABBREVIATION

AIDS	Acquired Immuno-deficiency Syndrome
AZT	Azidothymidine
HIV	Human Immuno-deficiency Virus
WHO	World Health Organization
UNAIDS	Joint United Nations Programme on HIV/AIDS

CHAPTER I
INTRODUCTION

1.1 Background & Rationale

It is undeniable nowadays that AIDS has become not only a health issue, but also a worldwide security concern. The disease is caused from infection by the HIV (HIV: Human Immunodeficiency Virus) or AIDS virus. The major risk factor of this epidemic is sexually transmitted infections (STIs). The epidemic of HIV/AIDS in the world was first reported in 1983, and it was spread among gay groups and prostitutes during the period from 1983 to 1989. However, the epidemic has now spread to people living all over the world.

In 1981, the first discovery of acquired immunodeficiency syndrome (AIDS) was described when a cluster of patients were found to have defective cellular immunity and Pneumocystis carinii pneumonia (Gallo and Montagnier,2003). By 2003, it was estimated that there were nearly 40 million HIV/ AIDS patients, 5 million new cases of HIV, and 3 million HIV-related deaths (Clinton, 2003; Gayle, 2003; Steinbrook, 2004).

The Centers for Disease Control and Prevention (2002b) in the United States released an estimate that there had been 1.3 to 1.4 million infected individuals and almost a half million deaths in 2001. Moreover, HIV infection was considered the fifth leading cause of death in 2002 for people between 25 to 44 years of age (Kochanck and Smith, 2004).

Currently, a one third of new cases result from heterosexual transmission, and two thirds of these are found in women (Centers for Disease Control and Prevention, 2004b). Fortunately, the number of AIDS-infected children infected by parental transmission has decreased more than 90 percent in the past 10 years (Centers for Disease Control and Prevention, 2002b). In addition, highly active antiretroviral therapy has helped an increasing number of people live with chronic HIV infection during this time (Cunningham et al., 2005).

In Thailand, the first case of HIV/AIDS was reported in 1984, and was a man who had returned from abroad. However, it was suspected that HIV/AIDS had been in the country from four to five years earlier. The Ministry of Public Health included 'AIDS' in its list of noticeable communicable diseases since 1985. The number of infected was down in 1991 since it had been observed by initial observational groups from June 1989. Initial observation was initially conducted twice a year in just a few provinces, and then in 1991, it was expanded nationwide. However, it was reduced to once a year from June 1995. Findings from the initial observation and some research studies, as well as the passive case-reporting system have provided a full picture of the HIV/AIDS epidemic, which can be divided into the following six stages. Stage 1: The epidemic began with transmission among gay groups - men who have sex with men - during the period from 1984 to 1987. Prevalence was relatively low as many

surveys were conducted during this period and it was found that only one prostitute working in Pattaya was infected with HIV. So, this finding caused those concerned to believe that HIV/AIDS was not a major problem in Thailand. Stage 2: The spread of HIV among injected drug users was detected in 1988. 15.6% of those surveyed in March 1988 were found to be infected whereas it was just 1-2% in 1987. Since the prevalence was over 30% since mid-1988, it was considered a serious concern and immediate problem. Stage 3: HIV began to spread into the prostitute population. The prevalence of infection among this group had rapidly increased in 1988-1990; from 0.5% in Chiang Rai province and 0-0.4% in Bangkok, Chiang Mai and Pattaya in 1988, to 44% in a survey in Chiang Mai in June 1989. Stage 4: The spread of HIV in males, who attended sexually transmitted infection (STI) clinics, began to be apparent in 1990. Stage 5: HIV spread to housewives, as demonstrated by pregnant women attending antenatal clinics. The first case was identified in 1991, and was followed by more and more cases afterwards. These women did not report any risky behavior because they contracted the virus from their husbands. Stage 6: The infection was found in newborns from HIV-infected mothers. The presence of HIV infection among women and infants indicated a serious situation and called for immediate action.

In the northeastern of Thailand, AIDS patients' situation is controlled by the Office of Disease Prevention and Control in Area 6 in Khon Kaen province. In one report released, the number of AIDS patients in six provinces in September 2006 was: 5,799 cases in Khon Kaen province, 5,134 cases in Udonthani province, 3,840 cases in Roi-Et province, 2,619 cases in Mahasarakham province, 2,260 cases in Loei province, 1,547 cases in Nongkhai province and 1,190 cases in Nongbulumpoo province.

The Office of Disease Prevention and Control in Area 6 reported the situation of AIDS patients in Roi-Et province as third in the epidemiology ranking. Roi-Et Provincial Health Office reported the number of AIDS patients from March 1989 - March 2006 as follows: 5,543 cases total, and 830 deaths (Ministry of Public Health, Roi-Et Public Health Office, 2006). From 1 October 2009 – 30 September 2010, There were 29 infected HIV/AIDS from a total of 529 pregnant patients (Labour Room, Roi-Et Hospital, Roi-Et Province, 2010).

Since AIDS is still an infectious disease expanding throughout the world including Thailand, and there is not any medicine or vaccine that can prevent or stop this virus, WHO released the "Three by Five Initiative" (3 by 5) in November 2003 to protect and provide treatment for HIV /AIDS-infected patients.

In Thailand, The Ministry of Public Health has strongly emphasized the importance of taking care of AIDS patients. Research was conducted five years ago that followed up about 60,000 AIDS cases. Patients received an anti-retrovirus and their quality of life improved. More than 75% of all the patients could live longer than 60 months when compared to the ones who did not receive an anti-retrovirus and could only survive for 20 months. It was found that the anti-retrovirus did not eliminate AIDS from the patients, but it gave them an increased life span . In 2005,

The Ministry of Public Health allocated a budget to buy more anti-retrovirus (50,000 to 80,000 doses) to use with AIDS patients. More importantly, the Ministry considered the seriousness of mother-to-child transmission since after delivery, they rarely came for follow up. The Ministry of Public Health allocated a budget of around 560 million baht from the Global Fund in order to take care of HIV/AIDS-infected mothers in communities over a period of 5 years, separated into 2 phases: Phase 1 during 2004 - 2005, and phase 2 during 2006 - 2008. For pregnant HIV- infected mothers, their babies would not drink breast milk 18 months for their protection. Both the mothers and their babies were treated with the anti-retrovirus, and babies would receive follow up treatment when they turned 2, 4 and 18 months. A 50 million baht budget for buying powdered milk was set up in 2010.

However, mother-to-child infectious transmission is considered as a serious crisis at this time, and the risk of HIV infection varies with different pregnancy phases: 20% transmission occurs before 36 weeks of delivery, 50% appears in a birth before due date and 30% happens during the intrapartum phase. Furthermore, mother-to-child transmission while breast feeding can be seen as 30 - 40% (Cunningham et al. 2005 : 1312). In 2010, a report showed that 29 HIV- infected cases were presented out of over 500 cases in whole pregnant women delivering their babies in the labor room at Roi-Et hospital in Roi-Et province. No standard guidelines for taking care of mothers and children in communities were announced. Therefore, the researcher is interested in this problem and wanted to study compare self – care behaviors between infected and non-infected/ AIDS mothers.

1.2 Research objective

To compare how self-care behavior of HIV/AIDS-infected mothers differs from that of non-infected mothers.

1.3 Scope of the study

Study area : The data used in this investigation was collected from Roi-Et hospital.

Population: The study population was based on postpartum mothers who used the postpartum services.

1.4 Conceptual framework

Orem's Self-Care theory was applied as a conceptual framework in this investigation. Orem suggested that everybody wants to live and achieve well-being without threatening diseases or dangers. The theory of Self- Care is related to the following six therapeutic self-care aspects: 1. Adequate air, water and food intake, 2. Excretion, 3. Activity/Rest, 4. Solitude/Social Interaction, 5. Prevention of Hazards, and 6. Promotion of Normality.

1.5 Limitation of the study

1. As being HIV/AIDS-infected seems to be a stigma in many communities, patients fear being found out by other people.

2. This study in Roi-Et hospital so it is limited to general to the another area.

1.6 Definition of operational terms

1. Mothers**:** A female patient, from the time she gives birth at Roi-Et hospital until the time she goes home.

2. Self-Care: Self- care behavior requisites relating to 1. Adequate air, water and food intake, 2. Excretion, 3. Activity/Rest, 4. Solitude/Social Interaction, 5. Prevention of Hazards, and 6. Promotion of Normality.

3. HIV/AIDS-infected mothers: Mothers who have been checked by a doctor in a laboratory and confirmed as HIV/AIDS–infected.

4. The postpartum procedures of mother: There are 13 aspects involving mothers after delivery namely : 1. Rest 2. Working 3. Food 4. Body cleaning 5. Breast and nipple cleaning 6. External genitals cleaning 7.Sexual intercourse 8.Medication 9. Family planning 10. Psychological health 11. Exercise 12. Disorder symptoms to come to hospital 13. Breastfeeding.

1.7 Expected outcomes and implications

1. Practical application : To be used as a guideline for helping HIV/AIDS-infected mothers.

2. Nursing education : To improve the practices of nurses.

1.8 Research design

This research was designed as a qualitative research using the phenomenological approach.

1.9 The procedure of research

1. Analyze data and interpretation.
2. Make a report.
3. Present the results of research to the research committee of College of Public Health Sciences, Chulalongkorn University.
4. Revise upon the recommendation.
5. Present the result of research with the online system of Chulalongkorn University.
6. Present the result of research with posters.
7. Publish the research.

CHAPTER II
LITERATURE REVIEW

2.1 HIV/AIDS

2.1.1 Global report UNAIDS report on the global AIDS epidemic | 2010

More than 5 million people are now receiving HIV treatment. In 2009 alone, 1.2 million people received HIV antiretroviral therapy for the first time-an increase in the number of people receiving treatment of 30% in a single year. Overall, the number of people receiving therapy has grown 13-fold, more than five million people in low and middle-income countries, since 2004. Expanding access to treatment has contributed to a 19% decline in deaths among people living with HIV between 2004 and 2009. This is just the beginning: 10 million people living with HIV who are eligible for treatment under the new WHO guidelines are still in need of treatment. Efforts are now underway for Treatment 2.0, a new approach to simplify the way HIV treatment is currently provided and to scale up access to life-saving medicines. Using a combination of efforts, this new approach could bring down treatment costs, make treatment regimens simpler and smarter, reduce the burden on health systems, and improve the quality of life for people living with HIV and their families. Modeling suggests that, compared with current treatment approaches, Treatment 2.0 could avert an additional 10 million deaths by 2025.In addition, the new platform could reduce the number of people newly infected with HIV by up to one million annually if countries provide antiretroviral therapy to all people in need, following revised WHO treatment guidelines.

2.1.2 HIV prevention works-new HIV infections are declining in many countries most affected by the epidemic

In 33 countries, HIV incidence has fallen by more than 25% between 2001 and 2009. Of these countries 22 are in sub-Saharan Africa. The biggest epidemics in sub-Saharan Africa-Ethiopia, Nigeria, South Africa, Zambia, and Zimbabwe-have either stabilized or are showing signs of decline. However , several regions and countries do not fit the overall trend. In seven countries, five of them in Eastern Europe and Central Asia, HIV incidence increased by more than 25% between 2001 and 2009.These figures demonstrate that positive behavior change can alter the course of the epidemic-while stigma and discrimination, lack of access to services and bad laws can make epidemics worse. In both cases, the effects are often profound. Among young people in 15 of the most severely affected countries, HIV prevalence has fallen by more than 25% as these young people have adopted safer sexual practices. Similar to treatment access, the room for continued improvement on this success is great. Young people’s knowledge about HIV is increasing but needs to grow further.

2.1.3 Virtual elimination of mother-to-child transmission of HIV is possible

In 2009, an estimated 370 000 children [220 000–520 000] contracted HIV during the prenatal and breastfeeding period, down from 500 000 [320 000–670 000] in 2001.Although this is a significant reduction, HIV continues to weigh heavily on maternal and child mortality in some countries. But in South Africa, which achieved almost 90% coverage of treatment to prevent mother-to-child transmission of HIV, transmission to infants has been drastically reduced. In many communities, countries and regions of the world, however, access to services to halt mother-to-child transmission needs to be scaled up. In 2009, UNAIDS called for the virtual elimination of mother-to-child transmission of HIV by 2015 . In the 10 most severely affected countries, this is a realistic aim and can be achieved with significantly increased action to implement proven strategies to eliminate HIV transmission to young people.

2.1.4 Women and girls need support

Slightly more than half of all people living with HIV are women and girls. In sub-Saharan Africa, more women than men are living with HIV, and young women aged 15–24 years are as much as eight times more likely than men to be HIV positive. Protecting women and girls from HIV means protecting against gender-based violence and promoting economic independence from older men.

2.1.5 Human rights are increasingly a part of national strategies

Human rights are no longer considered peripheral to the AIDS response. Today, the vast majority of countries (89%) explicitly acknowledge or address human rights in their national AIDS strategies, with 92% of countries reporting that they have programs in place to reduce HIV-related stigma and discrimination. At the same time, however, criminalization of people living with HIV still presents significant challenges to the AIDS response. More than 80 countries across the world have laws against same-sex behavior, and the free travel of people living with HIV is restricted in 51 countries, territories and areas. Such laws are not only discriminatory and unjust—they also drive HIV underground and inhibit efforts to expand access to life-saving HIV prevention, treatment care and support.

2.1.6 Financing the response is a shared responsibility

Increasingly, countries with heavy HIV burdens are assuming their responsibilities to resource the response to the degree that their means permit. Domestic expenditure is the largest source of HIV financing globally today, accounting for 52% of resources for the HIV response in low- and middle income countries. Improving financing for the global response will require ongoing efforts to mobilize domestic resources among countries that appear to be under-investing in the HIV response, increasing the efficient use of funds for HIV and other related health and development programs, and increasing external aid in a global environment of constrained resources.

2.1.7 A fragile progress

Despite extensive progress against a number of indicators on the global scale, many countries will fail to achieve Millennium Development Goal 6: halting and reversing the spread of HIV.

Having more than 5 million people receiving treatment is a major public health achievement but still represents only 35% of the people who need HIV therapy now, according to WHO guidelines issued in early 2010. Reaching the two thirds of people who need treatment, but are not yet receiving it, and financing this expansion in access to HIV therapy will require a continued and expanded global commitment to providing high quality HIV care for all. Knowledge of the epidemic and how to prevent HIV infection has increased among young people aged 15–24 years people frequently at the highest risk for infection. Six countries have achieved greater than 80% condom use at last higher-risk sex among males, and two countries have achieved this high level of condom use among females . Young people still lack knowledge and, importantly, often lack the tools they need to practice HIV risk-reduction strategies, however. Many people still lack ready access to condoms and lubrication, and people who inject drugs also lack sufficient access to sterile needles.

2.1.8 A new vision

Fulfilling the UNAIDS vision of zero new infections will require a hard look at the societal structures, beliefs and value systems that present obstacles to effective HIV prevention efforts. Poverty, gender inequity, inequity in health and the education system, discrimination against marginalized people, and unequal resource pathways all affect and often slow the HIV response. In a world that has had to learn to live with an evolving and seemingly unstoppable epidemic over the course of three decades, UNAIDS' vision of zero discrimination, zero new infections and zero AIDS-related deaths poses a challenge. But it is not a hopeless challenge. The vision of eliminating the toll that HIV imposes on human life can be made real using the knowledge and resources available today. Planners, programs administrators and implementers must make a sustained and dedicated effort to use the best social and scientific knowledge available. Strengthened programming using the latest knowledge and best practices to deliver effective prevention, treatment and care services to people in need, or at risk, is highly effective. Building social coalitions to reduce vulnerability to HIV infection supports individuals and strengthens communities. Safeguarding the health of mothers and infants and optimizing infant feeding provides a strong basis for the growth of new generations. Investing in health care and social support systems, working to eliminate violence against women and girls and promote gender equality and working to end stigma and discrimination against people living with HIV and members of other marginalized groups help to provide social environments that are effective against the spread of HIV and promote more general mental and physical well-being. And in providing HIV-specific services with an awareness of other health and social issues and forging appropriate linkages, the response to HIV can make an important contribution to global health.

2.1.9 AIDS scorecards

For the first time, UNAIDS is publishing scorecards to provide a quick overview of the progress made by United Nations Member States in the global AIDS response. Five scorecards for 1. HIV incidence, 2. prevention, 3. treatment, care, and support, 4. human rights and gender equality, 5. investment, show the top national

values for key indicators at the end of each chapter. They provide a snapshot of achievements, failures and obstacles in achieving universal access to HIV prevention, treatment, care and support. Readers seeking more detailed data can find a comprehensive tabulation of all available data on each of the indicators used for the international monitoring of national responses to HIV in the annexes.

2.1.10 Epidemic update

New HIV infections are declining

In 2009, there were an estimated 2.6 million [2.3 million–2.8 million] people who became newly infected with HIV. This is nearly one fifth (19%) fewer than the 3.1 million [2.9 million–3.4 million] people newly infected in 1999, and more than one fifth (21%) fewer than the estimated 3.2 million [3.0 million–3.5 million] in 1997, the year in which annual new infections peaked In 33 countries, the HIV incidence has fallen by more than 25% between 2001and 2009 ; 22 of these countries are in sub-Saharan Africa. In sub-Saharan Africa, where the majority of new HIV infections continue to occur, an estimated 1.8 million [1.6 million–2.0 million] people became infected in 2009; considerably lower than the estimated 2.2 million [1.9 million–2.4 million] people in sub-Saharan Africa newly infected with HIV in 2001. This trend reflects a combination of factors, including the impact of HIV prevention efforts and the natural course of HIV epidemics. Several regions and countries do not fit the overall trend. In seven countries, the HIV incidence increased by more than 25% between 2001 and 2009. In Western, Central, and Eastern Europe, Central Asia, and North America, the rates of annual new HIV infections have been stable for at least the past five years. However, evidence is increasing of a resurgence of HIV in several high income countries among men who have sex with men. In Eastern Europe and Central Asia, high rates of HIV transmission continue to occur in networks of people who inject drugs and their sexual partners.

2.1.11 Young people leading a revolution in HIV prevention

A recent analysis among young people provides further evidence of decreasing incidence and safer sexual behavior. Seven countries showed a statistically significant decline of 25% or more in HIV prevalence (the percentage of people living with HIV) by 2008 among young pregnant women attending antenatal clinics. Five countries-Botswana, South Africa, United Republic of Tanzania, Zambia, and Zimbabwe-showed a significant decline in HIV prevalence among young women or men in national surveys. Sexual behavior changed in most countries. In eight countries with significant declines in HIV prevalence, the sexual behavior of either men or women also changed significantly.

2.1.12 New infections among children decreasing

As access to services for preventing the mother-to-child transmission of HIV has increased, the total number of children being born with HIV has decreased. An estimated 370 000 [230 000–510 000] children were newly infected with HIV in 2009 (a drop of 24% from five years earlier).

2.1.13 AIDS-related deaths are decreasing

The number of annual AIDS-related deaths worldwide is steadily decreasing from the peak of 2.1 million [1.9 million–2.3 million] in 2004 to an estimated 1.8 million [1.6 million–2.1 million] in 2009 (Figure 2.3). The decline

reflects the increased availability of antiretroviral therapy, as well as care and support, to people living with HIV, particularly in middle- and low-income countries; it is also a result of creasing incidence starting in the late 1990s. The effects of antiretroviral therapy are especially evident in sub-Saharan Africa, where an estimated 320 000 (or 20%) fewer people died of AIDS-related causes in 2009 than in 2004, when antiretroviral therapy began to be dramatically expanded. AIDS-related mortality began to decline in sub-Saharan Africa and the Caribbean in 2005. Different patterns have emerged in other regions. In North America and Western and Central Europe, deaths due to AIDS began to decline soon after antiretroviral therapy was introduced in 1996. In Asia and Central and South America, the number of deaths has stabilized, but there is no indication yet of decline. Deaths continue to increase in Eastern Europe. Globally, deaths among children younger than 15 years of age are also declining. The estimated 260 000 [150 000–360 000] children who died from AIDS-related illnesses in 2009 were 19% fewer than the estimated 320 000 [210 000–430 000] who died in 2004. This trend reflects the steady expansion of services to prevent transmission of HIV to infants and an increase (albeit slow) in access to treatment for children.

2.1.14 Trends in the number of people living with HIV

UNAIDS estimates that there were 33.3 million [31.4 million–35.3 million] people living with HIV at the end of 2009 compared with 26.2 million [24.6 million–27.8 million] in 1999—a 27% increase . Although the annual number of new HIV infections has been steadily declining since the late 1990s, this decrease is offset by the reduction in AIDS-related deaths due to the significant scale up of antiretroviral therapy over the past few years . This report revises the estimate of the number of people living with HIV in 2008 of 33.4 million [31.1 million–35.8 million] published in AIDS epidemic update: November 2009, to 32.8 million [30.9 million–34.7 million], which is within the uncertainty range of the previous estimate. This revision is based on additional data becoming available for many countries , including data from population-based surveys such as in Mozambique. AIDS epidemic update: November 2009 included Mexico in Latin America. This report includes Mexico in North America and categorizes the rest of Latin America as Central and South America. This report presents trend analysis based on the new definition of these regions. The estimated number of children living with HIV increased to 2.5 million [1.7 million–3.4 million] in 2009 . The proportion of women living with HIV has remained stable, at slightly less than 52% of the global total . Sub-Saharan Africa still bears an inordinate share of the global HIV burden. Although the rate of new HIV infections has decreased, the total number of people living with HIV continues to rise. In 2009, that number reached 22.5 million [20.9 million–24.2 million], 68% of the global total. Sub-Saharan Africa has more women than men living with HIV. The largest epidemics in sub-Saharan Africa-Ethiopia, Nigeria, South Africa, Zambia, and Zimbabwe have either stabilized or are showing signs of decline. The estimated 1.3 million [1.1 million–1.5 million] people who died of HIV-related illnesses in sub-Saharan Africa in 2009 comprised 72% of the global total of 1.8 million [1.6 million–2.0 million] deaths attributable to the epidemic.

2.1.15 ASIA

Asian epidemic largely stable

In Asia, an estimated 4.9 million [4.5 million–5.5 million] people were living with HIV in 2009, about the same as five years earlier. Most national HIV epidemics appear to have stabilized. No country in the region has a generalized epidemic. Thailand is the only country in this region in which the prevalence is close to 1%, and its epidemic appears to be stable overall. A resurgent epidemic in the late 1990s (when up to 60 000 people were becoming newly infected annually) has since receded. The adult HIV prevalence was 1.3% [0.8%–1.4%] in 2009, and the HIV incidence had slowed to 0.1% (39). In Cambodia, the adult HIV prevalence declined to 0.5% [0.4%– 0.8%] in 2009, down from 1.2% [0.8%–1.6%] in 2001. But the HIV prevalence is increasing in such low-prevalence countries as Bangladesh, Pakistan (where drug injecting is the main mode of HIV transmission), and the Philippines.

New HIV infections mixed progress

There were 360 000 [300 000–430 000] people newly infected with HIV in 2009,20% lower than the 450 000 [410 000–500 000] in 2001. Incidence fell by more than 25% in India, Nepal, and Thailand between 2001 and 2009. The epidemic remained stable in Malaysia and Sri Lanka during this time period. Incidence increased by 25% in Bangladesh and Philippines between 2001 and 2009 even as the countries continue to have relatively low epidemic levels.

Epidemic patterns vary between and within countries

The overall trends in this region hide important variation in the epidemics, both between and within countries. In most of them, the epidemics appear stable. In many countries in the region, national epidemics are concentrated in a relatively small number of provinces. In China, five provinces account for just over half (53%) of the people living with HIV , and HIV infection levels in Indonesia's Papua province are 15 times higher than the national average . Asia's epidemics remain concentrated largely among people who inject drugs, sex workers and their clients, and men who have sex with men. Incidence patterns can vary considerably in large countries such as India. About 90% of people newly infected with HIV in India are believed to have acquired it during unprotected sex, but the common use of contaminated injecting equipment by two or more people on the same occasion is the main mode of HIV transmission in the country's north-eastern states .

Sex work-central to the region's epidemics

Paid sex features centrally in the region's HIV epidemics. In some countries such as Viet Nam, condom use during commercial sex is infrequent. Further, the people who inject drugs in some countries are also buying or selling sex. Almost one in five (18%) surveyed female sex workers in Myanmar tested HIV-positive in the mid-2000s. In southern India, up to 15% of female sex workers were living with HIV . The Indian state of Karnataka has shown evidence that intensive HIV prevention efforts among female sex workers can be highly effective. A four-year prevention program in 18 of the state's 27 districts almost halved HIV prevalence among young antenatal clinic attendees (from 1.4% to 0.8%).

Injecting drug use-fuelling new epidemics

It is estimated that as many as 4.5 million people in Asia inject drugs, more than half of whom live in China. India, Pakistan, and Viet Nam also have large numbers of people who inject drugs. In Asia, on average, an estimated 16% of the people who inject drugs are living with HIV, although the prevalence is considerably higher in some countries. In studies in Myanmar, up to 38% of the people who inject drugs have tested HIV-positive; this is estimated to be 30%– 50% in Thailand and more than half in parts of Indonesia. In Viet Nam, between 32% and 58% of people who inject drugs are living with HIV in various provinces. In China, an estimated 7%–13% of the people who inject drugs are living with HIV.

Men who have sex with men—marginalized but not marginal to the growth of the epidemic

High HIV prevalence among men who have sex with men has been reported in several countries: 29% in Myanmar, 5% nationally in Indonesia , 6% in the Laotian capital of Vientiane , between 7% and 18% in parts of southern India , and 9% in rural parts of Tamil Nadu state in India . The epidemic among men who have sex with men in Thailand had been largely ignored until a study uncovered 17% prevalence in Bangkok in 2005. Subsequent studies in 2005 and 2007 found that the infection levels had risen to 28% and 31% , and an annual HIV incidence of 5.5% was recorded in 2008 .Surveys have also found rising HIV prevalence in China among men who have sex with men, including in Shandong and Jiangsu provinces and in the city of Beijing . Although studies in Asia suggest that a significant proportion of men who have sex with men also have sex with women, the risk of living with HIV appears to be much higher for men who only have sex with men. As the epidemics mature in Asia, HIV is spreading more widely, especially to the female partners of people who inject drugs and the clients of sex workers and their other sex partners. In Asia overall, women account for a growing proportion of HIV infections: from 21% in 1990 to 35% in 2009.

New HIV infections among children

The estimated number of children younger than 15 years living with HIV has increased marginally, from 140 000 [92 000–190 000] in 2005 to 160 000 [110 000 –210 000] in 2009. But decreasing HIV incidence and slowly widening access to services that prevent mother-to-child transmission of HIV have led to a steep drop in the number of children becoming newly infected. An estimated 22 000 [15 000–31 000] children aged 0–14 years became infected in 2009—a 15% decrease on the 1999 estimate of 26 000 [18 000–38 000]. AIDS-related deaths in this age group have declined by 15% since 2004, from 18 000 [11 000–25 000] to 15 000 [9000–22 000].

AIDS-related mortality stable

The number of deaths has stabilized in Asia, but there are no indications of a decline. There were an estimated 300 000 [260 000–340 000] AIDS-related deaths in 2009 compared with 250 000 [220 000–300 000] in 2001.

Significant strides in preventing mother-to-child transmission

Preventing mother-to-child transmission of HIV has been a fundamental advance in the AIDS response for the past decade. Infection rates among children born to mothers living with HIV have dropped significantly in recent years, from 500 000 [320 000–680 000] in 2001 to 370 000 [230 000–510 000] children infected with HIV in 2009. Several countries have advanced efforts to prevent the mother-to-child transmission of HIV. Botswana, Namibia, South Africa and Swaziland have achieved more than 80% coverage of antiretroviral prophylaxis to prevent mother-to-child transmission. Seven other countries in sub-Saharan Africa have coverage levels of 50% to 80%. Sub-Saharan Africa as a whole achieved 54% [40%–84%] coverage. In East and Southern Africa, 68% [53%–95%] of pregnant women living with HIV received antiretroviral medication to prevent mother-to-child transmission in 2009 (up substantially from 15% in 2005). In West and Central Africa, however, coverage lags at 23% [16%–44%] . Worldwide, 53% [40%–79%] of women in low- and middle-income countries received antiretroviral medication to prevent the mother-to-child transmission of HIV in 2009, versus 45% [37%–57%] in 2008 and 15% in 2005. The gap in reaching the target of 80% coverage of antiretroviral prophylaxis for preventing mother-to-child transmission is becoming more concentrated in a handful of countries, with 14 countries comprising more than 80% of the global gap. Nigeria alone now contributes to 32% of the gap, with the Democratic Republic of the Congo next, contributing 7% of the gap. The proportion of pregnant women in low- and middle-income countries who received an HIV test reached 26%, up from 21% in 2008 and 7% in 2005 —progress, but still a low figure, on the path towards the UNAIDS goal of virtually eliminating the mother-to-child transmission of HIV by 2015. In the 25 countries with the greatest number of pregnant women living with HIV,2 the percentage receiving HIV testing and counseling varied greatly—from more than 95% in South Africa and Zambia to 9% in the Democratic Republic of the Congo and 6% in Chad . Coverage for services for preventing mother-to-child transmission has lagged behind antenatal care access. In addition, women living with HIV continue to have a high unmet need for family planning: in some countries, more than one quarter of women living with HIV do not desire their current pregnancy or would like to delay their next pregnancy by two years. Strengthening family planning services and the delivery of maternal, newborn and child health care would produce better outcomes for babies and their mothers. The efficacy of antiretroviral drugs in preventing mother-to-child transmission of HIV varies with the type of regimen used and the duration over which it is given. Combination regimens which include different types of antiretroviral drugs are more efficacious than mono-therapies. Mono-therapies are also prone to building antiretroviral resistance in the virus, which may limit future therapeutic options when treatment is needed. According to the 2010 WHO treatment guidelines it is recommended that pregnant women living with HIV and their exposed infants receive combination therapy rather than single-dose Nevirapine. Antiretroviral prophylaxis is also recommended during breastfeeding in settings where breastfeeding is judged to be the safest infant feeding option.

In addition, all women eligible for treatment under WHO guidelines should receive an appropriate combination therapy for their own health. In the 59 low- and middle-income countries that provided disaggregated data for their prevention of mother-to-child regimens around 30% of pregnant women received a single dose of Nevirapine, while 54% received a combination regimen to avoid mother-to-child

transmission of HIV. About 15% of all mothers received ongoing antiretroviral therapy based on eligibility criteria for treatment. Figure 3.11 shows the distribution of regimens given for the prevention of mother-to-child transmission in 2009 for the 25 countries with the greatest number of HIV positive pregnant women. Of those countries 10 have moved from using single-dose Nevirapine to providing more efficacious combination regimens.

2.2 Postpartum care

2.2.1 Definition.

Postpartum care encompasses management of the mother, newborn, and infant during the postpartum period. This period usually is considered to be the first few days after delivery, but technically it includes the six-week period after childbirth up to the mother's postpartum checkup with her health care provider.

2.2.2 Purpose.

Immediately following childbirth, a new mother experiences profound physical and emotional changes. She may stay in the hospital a very short time, even as little as 24–48 hours after delivery. The physical and emotional care a woman receives during the postpartum period can influence her for the remainder of her life.

During the postpartum period the mother is at risk for such problems as infection, hemorrhage, pregnancy induced hypertension, blood clot formation, the opening up of incisions, breast problems, and postpartum depression.

2.2.3 Postpartum care in the hospital.

The initial phase of the postpartum period encompasses the first one to two hours after delivery. It takes place most often in the birthing room or in a recovery room. Once this initial phase is over, the woman has passed through the most dangerous part of childbirth. Assessments of pain, the condition of the uterus, vaginal discharge, the condition of the perineum, and the presence/absence of bladder distension (followed by appropriate interventions) are part of the initial postpartum evaluation; and should be done every 15 minutes for the first hour, then generally every 30 minutes for the second hour, and every four to eight hours thereafter depending on facility policy.

Pain/Discomfort. The degree of pain and discomfort from incisions, lacerations, and uterine cramping (afterbirth pains) is assessed by hospital staff. The woman may also complain of muscle pain after a prolonged labor. If the level of pain warrants it, analgesic medications are given, usually orally. Women who have undergone cesarean births may have more pain than women who have given birth vaginally, and may need inject-able analgesics. If a woman complains of pain in her calf, she should be evaluated for thrombophlebitis. Also, if a woman complains of a headache, her blood pressure should be checked to rule out the presence of pregnancy-induced hypertension. A woman who received epidural anesthesia during delivery may develop a "spinal headache." A spinal headache is due to the loss of cerebrospinal fluid from the subarachnoid space that may occur during the administration of the spinal anesthesia. Spinal headaches should be treated by the

anesthesiologist or nurse-anesthetist. Treatment for this type of headache typically includes keeping the patient flat in bed, encouraging increased fluid intake, and administering pain medication.

Breast engorgement. is characterized by low-grade fever and the absence of systemic symptoms. It is usually bilateral; the breasts feel warm to the touch and appear shiny. Pain from breast engorgement can be minimized for the breastfeeding mother by mild analgesics, the application of warm packs, and frequent nursing. For the mother who is not breastfeeding, this pain can be minimized by mild analgesics and the application of cold packs. A nursing mother may find that the use of a lanolin-based preparation or a nipple shield (although controversial) provides relief for sore or cracked nipples. Changing positions for the nursing baby also can help in reducing irritation and minimizing stress on sore spots. A plugged duct can also cause breast pain. Breast pain caused by a plugged duct is distinguished from breast engorgement by the fact that it is usually confined to one breast and the breast is not warm to the touch. This pain may be relieved by heat packs, gentle massage of the breast toward the nipple, and changing positions for nursing the baby.

Fundus. The condition of the uterus is assessed by evaluating the height and consistency of the fundus (the part of the uterus that can be palpated abdominally). Immediately after delivery, uterine contractions begin triggering involution. Involution is the process whereby the uterus and other reproductive organs return to their state prior to pregnancy. To properly palpate the uterus, the woman is positioned flat on her back (supine). The health care provider places one hand at the base of the uterus above the symphysis pubis (the inter-pubic joint of the pelvis) in a cupping manner (to support the lower uterine ligaments). Then, she presses in and downward with the other hand at the umbilicus until she makes contact with a hard, globular mass. If the uterus is not firm, light massaging usually results in tightening. Massaging of the uterus should not be so vigorous as to cause the mother pain. A mother who has had a cesarean delivery should be medicated, if possible, prior to assessment of the fundus; and the health care provider should use the minimal amount of pressure necessary to locate her fundus. The height of the fundus after the first hour following delivery is at the umbilicus or above it. Every day the fundal height decreases by approximately the width of one finger (one cm).The fundal height may be palpated off of midline because of a distended bladder. If possible, the woman should be encouraged to empty her bladder prior to assessment of the fundus. A full bladder can prevent uterine involution.

A woman sometimes receives the medication oxytocin (Pitocin) after the delivery of the placenta. Oxytocin causes the uterus to contract and can decrease the amount of postpartum bleeding. The health care provider should assess the condition of the uterus frequently, and may need to massage the uterus gently to encourage its clamping down on itself, especially when oxytocin has not been given. If the uterus does not firm to gentle massage, then a clot may be present inside. Gentle pressure on the uterus following massage, and while simultaneously supporting the base of the uterus, may expel the clot. If massaging the uterus does not result in a firming of the fundus, then the physician or nurse-midwife should be contacted

immediately. The existence of severe atony or a retained fragment of placenta may result in excessive loss of blood.

Vaginal discharge(Lochia). The color and amount of vaginal discharge (lochia) is assessed by frequently removing the perineal pad and checking the flow of lochia after delivery. An excessive amount could be a sign of a complication such as clot formation or a retained portion of the placenta. The vaginal discharge is red for one to three days following delivery and is called *lochia rubra.* Between days two and 10, the discharge changes to a pink or brownish color and is called *lochia serosa*. The last phase occurs when the vaginal discharge turns white. This vaginal discharge is referred to as *lochia alba* and may occur from 10–14 days postpartum. The spotting can continue for another six weeks. It is common in mothers who breastfeed their babies. A constant trickling of blood or the soaking through of a perineal pad in an hour or less is not normal and should be further evaluated.

Perineum. The condition of the perineal area is assessed for an episiotomy or laceration repair. An episiotomy is the surgical procedure whereby the physician or nurse-midwife extends the vaginal outlet immediately prior to delivery of the baby. The incision is repaired with sutures after delivery.

Generally an episiotomy will be 1–2 inches (2.5–5 cm) in length. By 24 hours postpartum the edges of the episiotomy should be fused together. An episiotomy may be covered over with edematous tissue and not easily visible, so the examination must the done carefully. If the laceration or episiotomy is infected it appears red and swollen, and discharges pus. Treatment depends on the severity of the infection and may include sitz baths; application of an antibiotic cream to the wound; oral antibiotics; or opening the wound, cleansing the site, and resuturing it.When the perineal area is examined, the patient should also be checked for the presence of a hematoma (a round area filled with blood) that is caused by the rupturing of small blood vessels on the surface of the perineum. After observing the perineum, the rectal area also is evaluated for hemorrhoids, making note of their size, character, and number.

The following measures are effective in providing relief of perrinal discomfort:

1. Application of cold packs to the perineum for the first 24 hours after delivery.
2. Application of warm packs to the perineum after the first 24 hours.
3. Rinsing of the perineal area with warm water after every void and/or bowel movement. (This is also helpful in preventing infection and in promoting healing.)
4. Use of anesthetic sprays and creams. Cleaning the area with witch hazel pads (Tucks) is also soothing.
5. Sitting in a sitz bath—a small basin that fits on top of the toilet through which warm water flows three or four times a day. After discharge a woman may use her bathtub at home for this purpose.

Bladder distention. In the first 48 hours after delivery it is normal to have an increase in the formation and secretion of urine (postpartum duress). A full

bladder can cause the uterus to shift upwards and not contract effectively. An overextended bladder can even cause injury to the urinary system. A woman should be encouraged to void within her first hour postpartum; and her bladder should be checked after voiding, since urinary retention can be a problem. If the woman had a cesarean section and has a Foley catheter in place in her bladder, then the output is checked every hour during the initial postpartum period. The Foley catheter is likely to be removed approximately eight hours after surgery. The health care provider needs to assess for voiding after removal of the Foley catheter.

Postpartum care after hospital discharge. Ideal postpartum care would include several home visits by health care providers in the one to two weeks following delivery to assess the status of the mother and her family. This rarely happens in the United States, but follow-up phone calls by health care providers during the first week and a visit by the mother and baby to her physician or nurse-midwife one to two weeks after the birth are desirable.Several problems that may arise during the postpartum period do not typically develop until after the new mother is discharged from the hospital. These include mastitis, endometritis, and postpartum depression.

Mastitis. Mastitis is an inflammation of the breast, usually caused by streptococcal or staphylococcal infection. It can develop any time a woman is breastfeeding, but usually does not occur before the tenth postpartum day. Symptoms of mastitis often mimic those of the flu, and include body aches and a fever of 101°F (38.6°C) or more. Mastitis is treated with a course of antibiotics, and women should begin to feel better within 24 hours of beginning the antibiotics. If this does not happen, the woman may need to be hospitalized for intravenous antibiotics.

Other measures that may help the mother feel better include bed rest for at least 24 hours, moist heat on the infected breast every two to three hours (when awake), acetaminophen for pain and fever relief, increased fluid intake, and going without a bra for several days. Mastitis does not contaminate the breast milk and the baby should continue to nurse from both breasts. If nursing from the affected breast is too painful, use of a breast pump or manual expression of milk may be needed to prevent engorgement and facilitate continued milk production.

Endometritis. Endometritis is an inflammation of the endometrium, the mucous membrane lining the uterus. It is usually caused by a bacterial infection. Symptoms of this infection include fever, abdominal pain, and foul-smelling vaginal discharge. Physical examination of the patient reveals a tender uterus. Endometritis is treated with a course of antibiotics and other care, including bed rest, acetaminophen for pain and fever relief, and increased fluid intake. Severe cases may require hospitalization.

Postpartum depression. Postpartum depression may appear at any time during the first year after a baby's birth. It ranges in severity from mild, postpartum "blues" that last only a few days shortly after birth, to intense, suicidal, depressive psychosis. Not only does postpartum depression cause distress for the new

mother and her partner, but it can also interfere with the new mother's ability to bond with her baby and to relate to any other children she may have.

Symptoms of severe postpartum depression or psychosis include insomnia, hallucinations, agitation, and bizarre feelings or behavior. Any new mother exhibiting signs of postpartum depression should be referred to mental health professionals, support groups, and/or new mother groups. Psychotropic medication is often helpful, as is psychotherapy. About 10% of cases of postpartum depression are caused by postpartum thyroiditis, a temporary inflammation of the thyroid gland that usually clears up spontaneously in one to four months. Whenever postpartum depression occurs, thyroid function should be tested to rule out hyperthyroidism or hypothyroidism as the cause of symptoms.

2.2.4 Six-week postpartum check-up

Although this postpartum check-up is traditionally scheduled six weeks after delivery, it may be done any time between four weeks and eight weeks after delivery. It usually includes a breast examination, a pelvic examination, any necessary laboratory tests, and a health education component covering such areas as breastfeeding, birth control, weight reduction, etc. This checkup is also an opportunity to review the pregnancy and birth experience, to discuss problems and assess for depression, to provide emotional support, to answer questions, and to consider if any further referrals are necessary for the new mother.

2.3 Dorothea Orem's Self-Care

2.3.1 Introduction

1. One of foremost nursing theorists.
2. Born 1914 in Baltimore.
3. Earned her diploma at Providence Hospital – Washington, DC.
4. 1939 – BSN Ed., Catholic University of America.
5. 1945 – MSN Ed., Catholic University of America.
6. Involved in nursing practice, nursing service, and nursing education.
7. During her professional career, she worked as a staff nurse, private duty nurse, nurse educator and administrator and nurse consultant.
8. Received honorary Doctor of Science degree in 1976.
9. Published first formal articulation of her ideas in Nursing: Concepts of Practice in 1976, second in 1980, and in 1995.

2.3.2 Development of theory

1. 1949-1957 Orem worked for the Division of Hospital and Institutional Services of the Indiana State Board of Health.
2. Her goal was to upgrade the quality of nursing in general hospitals throughout the state. During this time she developed her definition of nursing practice.
3. 1959 Orem subsequently served as acting dean of the school of Nursing and as an assistant professor of nursing education at CUA.

She continued to develop her concept of nursing and self care during this time.

4. Orem's Nursing: Concept of Practice was first published in 1971 and subsequently in 1980, 1985, 1991, 1995, and 2001.

2.3.3 Orem's general theory of nursing

Orem's general theory of nursing in three related parts : Theory of self care, Theory of self care deficit, Theory of nursing system.

Theory of self care. This theory Includes:

1. Self care practice of activities that individual initiates and perform on their own behalf in maintaining life ,health and well being

2. Self care agency is a human ability which is "the ability for engaging in self care" conditioned by age developmental state, life experience socio-cultural orientation health and available resources

3. Therapeutic self care demand "totality of self care actions to be performed for some duration in order to meet self care requisites by using valid methods and related sets of operations and actions"

4. Self care requisites-action directed towards provision of self care. 3 categories of self care requisites are ; Universal, Universal self care requisites ,Developmental self care requisites.

Theory of self care deficit

1. Specifies when nursing is needed

2. Nursing is required when an adult (or in the case of a dependent, the parent) is incapable or limited in the provision of continuous effective self care. Orem identifies 5 methods of helping: Acting for and doing for others, Guiding others, Supporting another, Providing an environment promoting personal development in relation to meet future demands, Teaching another.

Theory of nursing systems

1. Describes how the patient's self care needs will be met by the nurse, patient, or both.

2. Identifies 3 classifications of nursing system to meet the self care requisites of the patient.

3. Wholly compensatory system.
4. Partly compensatory system.
5. Supportive educative system.
6. Design and elements of nursing system define.
7. Scope of nursing responsibility in health care situations.
8. General and specific roles of nurses and patients.
9. Reasons for nurses' relationship with patients and.

10. The kinds of actions to be performed and the performance patterns and nurses' and patients' actions in regulating patients' self care agency and in meeting their self care demand.

11.Orem recognized that specialized technologies are usually developed by members of the health profession.

12.A technology is systematized information about a process or a method for affecting some desired result through deliberate practical endeavor, with or without use of materials or instruments.

2.4 Related researches

2.4.1 Orapum Udomporn, (2007). Study : Self- Care Among People with HIV/AIDS Treated with Anti-Retroviral Medicine.

The present qualitative research adopted a descriptive exploratory design with the aim to study self-care practices among people living with HIV/AIDS individuals who were receiving HIV antiviral therapy. Self- Care practices of interest include medication taking behaviors, prevention and transmission of opportunistic infections, and health promotion and rehabilitation behaviors. Participant were nine HIV/AIDS person receiving treatments from the HIV antiviral medication clinic at Sri Somdej Hospital, Roi – Et province. Data collection was done through in- depth interviews and participant observation. Data analysis was performed using content analysis. Results revealed that most participants possessed appropriate self-care practices with regard to taking HIV antiviral medication; prevention of opportunistic infection; contacting and transmitting diseases particularly respiratory system disorder, skin diseases, and fungal infection; and prevention of sexually transmitted diseases. In terms of health promotion behaviors such as eating nutritious meals, avoiding alcohol consumption and cigarette smoking, having adequate sleep and practicing proper stress management, only a small portion of participants maintained inappropriate health promotion behaviors. These individuals reported inconsistent and interruptive medication taking, practice risky sexual behaviors, and intake of less nutritious meals. They further admitted alcohol consumption, cigarette smoking, inconsistent exercise, and poor stress management strategies.

2.4.2 Nutawan Chantanakorn and Ruengrudee Weerawongphom, (2007). Study : Perinatal HIV Transmission Rate in Phichit Province in 2002-2007.

This cross- sectional survey's research's objectives are studying mother-to-child HIV-infected rates, antivirus usage in HIV- infected mothers and children born with HIV-infected mothers. The sample group is every mother giving birth on October 1, 2002 to September 30,2007 (214 mothers) and every child born with HIV- infected mother on October 1, 2002 to September 30,2007 (217 children including 3 twins) from every hospital that has mother - to –child HIV- spread protection in Phichit; that is; Phichit Hospital. Tapanhin Crown Prince Hospital, Bangmoolnak Hospital, Potalae Hospital, Sam-ngam Hospital. Popratabchang Hospital, Wangsaipoon Hospital, Tapklo Hospital and Wachirabaramee Hospital.

Data collected comes from individual mother-to- child HIV – infected follow- ups. Data analyzed is shown in frequency value and percentage. It is found that 93.5% HIV- infected mothers got pregnancy care, 57.50% got AZT (Zidovudine) during pregnancy for four weeks, or more 86.9 % got AZT on giving birth. There are 178 children born with HIV-infected mothers, equal to 82.0%, still alive. 84.1% were normally born. 15.9% were born by belly- cutting. 60.4% got AZT for one week. 37.5% got AZT for six weeks. 80% got NVP (Nevirapine). 81.6% is the follow up for HIV- infected children. One reason for children not having blood test is moving to new place, equal to 55.0%. The mother – to – child HIV spread rate is 2.3%. The mother – to – child HIV spread protection can be more effective if there is an increase of pregnancy care, giving antivirus medicine to HIV infected mothers during pregnancy, regular hospital service and complete data collection.

2.4.3 Siriporn Nonenoy (2009) Study : Health related quality of life among persons living with HIV/AIDS in 3 hospitals in Thailand.

A cross sectional study looked at the association between sociodemographic factors, HIV/AIDS clinical history and health-related quality of life (QOL) in HIV/AIDS persons. It used the WHOQOL-BREF-THAI questionnaire completed by 3,596 patients during 2008 in three Thai hospitals. The questionnaire explored five QOL domains: Physical, Psychological, Social, Environment and Overall and it was for the first time administered to many HIV/AIDS patients in Thailand. Descriptive statistics and inferential statics (bivariate and multivariate : one-way ANOVA, Kruskal-Wallis Test, Pearson Correlation and independent test)) were used to test association between independent factors and QOL.

Results : The following associations were all statistically significant. Males had higher QOL than females in Physical, Psychological and Overall domains. Younger age was associated with higher QOL in Physical and Social domains, older age in Psychological and Environment domains. Married had higher psychological QOL than single and separated. Good adherence to, more than 3 year duration of ARV treatment and not suffering AIDS related events were associated with higher QOL in all except social domains. VL <50 copies/ml had higher QOL in all domains except social and environment domain. Higher education, high income and more than 200 CD4+ cell per mm3 had higher QOL in all domains.

Conclusion : Thai HIV/AIDS persons have health-related moderate to high QOL comparable similar person from high income countries. This is mainly due to similarities in some socio-demographic characteristics, free availability of and adherence to ARV, accessibility to other of HIV/AIDS care components. The WHOQOL-BREF-THAI questionnaire is an appropriate instrument to measure QOL in Thai HIV/AIDS persons.

2.4.4 Tidarat Sujipttham (2010) Study : Adherence assessment and factors affecting adherence to ART among HIV- infected/AIDS at Taksin hospital.

This study was an analytical, cross–sectional study. The objectives of this study were to (1) assess the adherence to ARV medication among HIV/AIDS patients at TAKSIN hospital by using multiple adherence measurement. (2) Analyze the relationship between the factors affecting patient adherence to ARV medication. In

data collection was conducted by using interviewing and assessment tools during March to April 2010 in HIV/AIDS outpatient clinic at TAKSIN Hospital. The samples were 200 HIV/AIDS patients who take antiretroviral medicines. The results showed that majority of the samples were male (53%), the average of age was 38.20 years-old, were married (43.5%), were completed primary school (35.5%), were employee (58.5%), had an income less than 5,000 baht per month (42%), were in universal health care coverage program (70.5%), contacted infection due to heterosexual transmission (65.5%), took ARV medicine for 3 years, no adverse event from antiretroviral (81.5%), at present the patients took ARV medicines two times/day (70.5%). Using multi-method consisted of self-report, visual analogue scale (VAS), pill identification test (PIT) and pill count in order to assess the adherence of HIV/AIDS patients, the results revealed that majority of patients (70%) had adherence to ARV medication (adherence level more than 95%). The relationship between adherence and the factors affecting patient adherence to ARV medication by using multivariate logistic regression analysis showed that female, self-efficacy and patient health care provider relationship had positive relationship with adherence to ARV medicine ($p < 0.05$). In conclusion, the health care provider should provide the programs to enhance the self-efficacy of the HIV/AIDS patients and also establish the good relationship between patients-providers in order to increase the adherence level to improve the effectiveness of treatment in HIV/AIDS patients.

2.4.5 Jennifer Tang and Nawal M. Nour. (2010). Study : HIV and Pregnancy in Resource- Poor Setting.

There are 33.4 million people living with human immunodeficiency virus (HIV) or acquired immunodeficiency syndrome. Globally, HIV/AIDS is the leading cause of death among women of reproductive age. In the United States and other developed countries, aggressive efforts to treat HIV- positive pregnant women with highly active antiretroviral therapy have decreased the maternal-to-child transmission (MTCT) from over 20% to less than 2%. However, in resource-poor setting, access to antiretroviral therapy (ART) is not readily available, and pernatal transmission rate remain as high as 45%. Women are at greater risk of heterosexual transmission of HIV, which is compounded by lack of condom use, imbalance of social power, and the high fertility rate. Prevention programs are needed to empower and educate women and engender community awareness for condom use. Prenatal screening and treatment, intra-partum ART, and postpartum prophylaxis must be made available to all women and children to prevent MTCT.

CHAPTER III

RESEARCH METHODOLOGY

This chapter describes the procedures to collect and analyze the data.

3.1 Population : The population of the study were mothers visiting Roi-Et Hospital and participating in the postpartum services. All of the population collected used to be in the following conditions:

1. Postpartum mothers who gave birth at the labor room at Roi-Et Hospital.
2. Recuperated mothers who stayed at the postpartum ward.
3. Mothers who received advices based on "The advice handbook of postpartum mother" or received the handbook during their recuperation at the postpartum ward.
4. Mothers who used the postpartum services at Roi-Et Hospital during March – April 2011.
5. Age range between 20-35 years old.
6. Postpartum mothers who were educated at a level of secondary school or lower.

Sampling technique : The population were selected by the approach of purposive sampling and divided into two groups: the study group and the comparison group.

1. The study group: The 8 mothers infected with HIV/AIDS, who were checked by the laboratory and confirmed as HIV/AIDS–infected, received postpartum services at the social work division (Maha Chakri Sirindhorn Center, Roi-Et Hospital, Roi –Et) during March–April 2011.

2. The comparison group: The 8 mothers, who were checked by the laboratory and confirmed by doctors to not be HIV/AIDS-infected, received postpartum services at the gynecology clinic (Gynecology room on the 3rd Floor, Chulabhorn Building, Roi-Et Hospital, Roi-Et) during March-April 2011.

3.2 Research instruments:

1. Structured interviews

The structured interviews used as instruments in this study were developed by the researcher regarding Orem's Self-Care theory (Orem, 1670). The questions in the interviews were classified into four categories: General information, HIV-infected motherhood, Six aspects of self-care mothers' behaviors, and Thirteen aspects of mothers' behaviors based on the advice handbook of postpartum mother at the postpartum ward at Roi-Et Hospital.

Part 1: General Information (administered to both groups)

1. Personal Information
2. Present illness and pregnancy records
3. Family illness records
4. Knowledge gained during pregnancy

Part 2: HIV-Infected Motherhood (administered to the HIV-infected mothers)

1. During pregnancy
2. After delivery
3. Breastfeeding
4. Health problems
5. Future planning

Parts 3: Six Aspects of Mothers' Self-Care Behaviors (administered to both groups)

1. Adequate food, water and air (3 questions)
2. Excretion (3 questions)
3. Activity and rest (4 questions)
4. Solitude / social interaction (4 questions)
5. Prevention of hazards; for example, breastfeeding, medication, contraception, examination of cervical cancer (4 questions)
6. Promotion of normality; for example, life satisfaction and a follow-up (2 questions)

Part 4: Thirteen aspects of mothers' behaviors (administered to both groups)

1. Rest (2 questions)
2. Working (1 question)
3. Food intake (5 questions)
4. Body cleaning (3 questions)
5. Breast and nipple cleaning (2 questions)
6. External genitals cleaning (3 questions)
7. Sexual intercourse (2 questions)
8. Medication (2 questions)
9. Family planning (1 question)
10. Psychological health (1 question)
11. Exercise (1 question)
12. Being hospitalized by disordered symptoms (5 questions)
13. Breastfeeding (1 question)

The subjects were asked whether they practiced the postpartum behaviors. The inferences of each response and the methods of scores calculating were as follows.

If patients said ‘Yes’, it meant they understood how to practice themselves correctly after delivery. The score valued at ‘1’.

However, if patients said ‘No’, it meant they did not understand how to practice themselves correctly after delivery. The score valued at ‘0’.

2. The validity and reliability of research instruments

Methods to valid the content

1. Presenting the draft of interviews including the outline of the study to four experts: 3 nursing experts of postpartum mothers and 1 study expert
2. Revising the interviews based on the experts’ suggestions
3. Presenting the revised the interviews to the proposal research committees of College of Public Health Sciences, Chulalongkorn University and revising the interviews once upon the committees’ recommendation
4. Presenting to Human Ethics Research Committees Institute United Group no.1, Chulalongkorn University and revising regarding the recommendation

Reliability of the instruments

1. Trying out the revised interviews with 5 postpartum mothers who were not participating in the study group
2. Checking the scores and evaluating the reliability of the interviews by using Kuder-Richarson’s method (KR-20), the reliability of this tool was 0.70.

3. The researcher’s assistant and preparation

There were two researcher’s assistants supporting in this study: an officer working at the gynecological clinic and an officer working at the social work division in the area of HIV-infected mothers. Furthermore, the officer working at the social work division has experiences in collecting data and conducting research. The assistants were explained about the purposes of the study, the subjects, benefits, the in-depth details of the interviews and methods before collecting data. Besides, they were trained how to use the interviews and how to record data. After that, they were given opportunities to ask questions about conducting this research. The interview guide was provided as well.

3.3 Data collection and procedure:

1. The consent letters were sent to the head nurse at the postpartum ward and the head social worker at Roi- Et Hospital, Roi-Et province.
2. The researcher introduced myself to the head nurse, nursing staff and the head social worker at Roi- Et Hospital. In addition, the researcher explained the research procedure, and asked for their cooperation in collecting data.
3. The researcher trained the two research assistants to collect data from the two groups of mothers by using the structured interview.
4. The researcher analyzed and interpreted data.
5. The researcher wrote a report and presented/published the study.

3.4 Data analysis

As this study was based on the phenomenological approach, data analysis and data collection were conducted simultaneously according to the following steps.

1. Rechecking the accuracy of the data collected from the interviews by asking from the informants and the research assistants

2. Encoding the subjects as 'Key Informants'

3. Encoding the informants as the following:

1. The study group or the HIV-infected postpartum mothers

A infers to data collected by interviewing the key informants who were HIV-infected postpartum mothers

F infers to data collected by interviewing the key informants who were female

1 infers to the first key informant

2 infers to the second key informant

3 infers to the third key informant

For example:

AF1 means the first key informant who was an HIV-infected postpartum mother

AF2 means the second key informant who was an HIV-infected postpartum mother

AF3 means the third key informant who was an HIV-infected postpartum mother

Encode and record data from every subjects.

2. The comparison group or the Non-HIV-infected postpartum mothers.

F infers to data collected by interviewing the key informants who were female

1 infers to the first key informant

2 infers to the second key informant

3 infers to the third key informant

For example:

F1 means the first key informant who was a non-HIV-infected postpartum mother

F2 means the second key informant who was a non-HIV-infected postpartum mother

F3 means the third key informant who was a non-HIV-infected postpartum mother

Encode and record data from every subjects.

4. Putting data coding in appropriate groups regarding determined purposes and issues

5. Interpreting key informants' opinions on thinking behavior based on the classified groups mentioned above and writing a behavior report due to the key informants' data

6. Data analysis on six aspects of self-care behaviors

Glaser's and Strauss' (1967) method of content analysis was applied in this study. The data analysis was a continuously dynamic process, which integrated between the data collection and the data coding. Interviews were transcribed and coded line by line. Field notes, memos and observation were conducted while collecting data as well. This data were coded, categorized and reviewed, and then related data were analyzed according to content. Consequently, the key concepts were organized into a theoretical model of study.

7. Data analysis on thirteen aspects of mothers' behaviors

Percentage was employed as descriptive statistics.

CHAPTER IV

RESULTS

Results

This qualitative research was conducted to compare self-care behaviors of eight HIV/AIDS-infected mothers to that of eight non-infected mothers who used the postpartum services at Roi-Et Hospital, Thailand. The data were collected by using structured interviews. Results and analysis were divided into four parts and presented in form of tables and description as shown below.

Part 1: General information of both informant groups
Part 2: Information of the HIV/AIDS-infected informants
Part 3: 6 Self-care aspects of both informant groups
Part 4: 13 Aspects of postpartum mothers' behavior of both informant groups

4.1 Part 1: General information of both informant groups

1. Personal information

Table1: Personal information

	HIV-infected cases (8 cases)		HIV-non infected cases (8 cases)	
	Number	**Percentage**	**Number**	**Percentage**
Age				
20-24	2	25.0	2	25.0
25-29	2	25.0	3	37.5
30-34	3	37.5	3	37.5
35-39	1	12.5	0	0
Marital Status				
Married	6	75.0	7	87.5
Divorced	2	25.0	1	12.5
Nationality				
Thai	8	100.0	8	100.0
Race				
Thai	8	100.0	8	100.0
Religion				
Buddhism	8	100.0	8	100.0
Occupations				
Housewife	2	25.0	1	12.5
Farmer	1	12.5	0	0
Merchant	2	25.0	2	25.0
Employee	3	37.5	5	62.5
Education Level				
Primary	1	12.5	1	12.5
Secondary	7	87.5	7	87.5
Domicile				
Muang district, Roi Et	6	75.0	5	62.5
Other districts, Roi Et	2	25.0	3	37.5

Tables 1 showed that all informants' ages were between 20-35 years old. Three of eight HIV/AIDS-infected informants were 30-34 years old (37.5%). Meanwhile, three non-infected informants were 25-29 years old (37.5%) and three of them were 30-34 (37.5%). Six of eight HIV/AIDS-infected informants were married (75%); two were divorced (25%). Seven non-infected informants were married (87.5%); only one informant in this group was divorced (12.5%). All of the informants have Thai nationality, Thai race, and Buddhist (100%).

The most of HIV/AIDS-infected informants were employees (37.5%), followed by housewives and merchants (25% each) while non-infected informants mostly worked as employees (62.5%), followed by merchants (25%) and housewife (12.5%).

The education level of most informants in both groups was secondary (87.5% each; 7 out of 8), only one person in each group finished primary level (12.5%).
The domicile of the HIV/AIDS-infected informants was mostly in Muang district, Roi-Et (75%) and two of them were in other districts (25%). Five of non-infected informants' domiciles were in Muang district, Roi-Et (62.5%) and three of them lived in other districts (37.5%).

2. Pregnancy and current illness records

Table 2: Personal information

Personal information	HIV-infected cases (8 cases)		HIV-non infected cases (8 cases)	
	Number	**Percentage**	**Number**	**Percentage**
Delivery methods				
Vaginal delivery	5	62.5	5	62.5
C-section delivery	3	37.5	3	37.5
Numbers of living				
1 child	5	62.5	3	37.5
2 children	3	37.5	4	50.0
Still birth	0	0	1	12.5
Numbers of gravidity				
Gravidity 1	3	37.5	3	37.5
Gravidity 2	4	50.0	2	25.0
Gravidity 3	1	12.5	2	25.0
Gravidity 4	0	0	1	12.5
Number of delivery				
Delivery 1	4	50.0	3	37.5
Delivery 2	4	50.0	5	62.5
Numbers of abortion				
Never	6	75.0	6	75.0
Abortion 1	2	25.0	2	25.0

Table 2: Presented that delivery : both groups presented the same, i.e. 5 cases were normal delivery and 3 informants cases were caesarean section.

The number of living children of HIV-infected informants 5 cases had one child 3 cases had 2 children HIV-non infected 3 cases had one child 4 cases had 2 children 1 case had a still birth.

3. Family illness records

No family illness was found in seven HIV/AIDS-infected informants' records (87.5%); only one of them, AF3, had a mother who had diabetes (12.5%). While five of non-infected informants had no family illness records (62.5%), three of them had the records (37.5%) as quoted below.

"My father has a liver cancer. And my mother, the doctor said that she has a bone tuberculosis and diabetes." (F3)

"My elder son has asthma." (F6)

"My parents have diabetes." (F8)

4. Knowledge gained during pregnancy at antenatal clinics

Both informant groups gained a bit different knowledge during their pregnancy as described below.

The HIV/AIDS-infected group was given knowledge focusing on nutritious food and eating behavior, followed by HIV/AIDS-antivirus medicine taking, non breastfeeding during postpartum period, and physical disorder symptoms.

In the same time, the non-infected group was also given knowledge focusing on nutritious food and eating behavior, followed by delivery preparation, breastfeeding, and physical disorder symptoms respectively.

4.2 Part 2: Information of the HIV/AIDS-infected informants

1. During pregnancy

1.1 Self-care

Each informant had different self-care behaviors as shown below;

"Be healthy by having 5 nutrients, taking adequate rest, and avoiding stresses and serious stuff." (AF1, AF6)

"Have adequate rest to be healthy." (AF2)

"Drink milk, and have 5 nutrients." (AF3)

"Take medicines on time as recommended and use a condom when having sex." (AF4)

"Don't have sex with anyone." (AF5)

"Eat nutritious food and don't drink alcohol." (AF7)

"Eat nutritious food and be optimistic." (AF2)

1.2 Antiretroviral medication

All HIV/AIDS-infected informants were given antiretroviral medicines during their pregnancy after they had been confirmed by a doctor as HIV/AIDS-infected. Seven informants took the medicines during their 4-7 months pregnancy. Only one informant, AF3, took the medicines before her pregnancy due to the preceding HIV/AIDS-infection.

Five informants could not remember the medicines' names. Only three of them could remember the medicines' names; AF1and AF8 received AZT and AF3 received GPO-via as quoted below;

"I can just remember AZT but I can't remember the others. I know exact time to take the medicines which is every 12 hours, at 8 a.m. and 8 p.m. For other medicines, I remember only their color because I take them all at the same time." (AF8)

1.3 Doctors' or nurses' recommendations

Most of recommendations were given by the head nurse of the HIV/AIDS section at the antenatal clinic. After received blood-check results, the head nurse sent reports to the doctor for diagnosis and gave some advices to patients as shown below;

"Take medicines on time and don't be stressful" (AF1, AF4, AF6, AF7)

"The nurse advised me to take care of myself better than normal people so I would not have any complications." (AF2, AF3)

"Do not have sex with many men and take care of myself" (AF5)

"I cannot breastfeed my child. I have to feed my child with the given formula milk from the hospital for a year." (AF8)

1.4 Symptoms after receiving antiretroviral medicines

After received the antiretroviral medicines, there was no disorder symptoms happened with 6 informants, but only 2 informants had some changes as they revealed;

"After took the medicines, I found that my legs and arms were smaller than before." (AF3)

"My skin looked healthier and more beautiful than before after taking the medicines. Before I was infected, I used to visit Wat Phra Baht Nam Phu, Lopburi and saw that the patients there had very terrible skin. Some HIV/AIDS-infected people informed me that these medicines would make my skin beautiful." (AF8)

2. Postpartum period

2.1 Self-care

The majority of informants took care of themselves by avoiding stresses, accept themselves as an HIV/AIDS-infected patient as they said;

"Be relaxed and avoid stresses." (AF1)

"Take an adequate rest, no stress" (AF2)

"Drink warm water and have food intake regularly" (AF3)

"Stay healthy, be calm and self-accept." (AF4)

"Do not smoke and drink alcohol." (AF5)

"Take the medicines continuously." (AF6)

"Have sufficient food and keep body clean." (AF7)

"Be optimistic and do not worry about the disease because the medication for this disease is continuously developed. Though being HIV/AIDS-infected, I can live as long as I keep myself healthy. Moreover, the infected people are accepted in the society nowadays." (AF8)

2.2 Antiretroviral medication

After delivery, all of the informants were given the antiretroviral medicines immediately till 2 weeks.

2.3 Doctors' or nurses' recommendations

All of the informants were given recommendations especially on taking medicines continuously, stresses and postpartum behaviors as quoted below;

"Take the medications continuously and avoid stresses." (AF1)

"They advised me to join mother and child care project." (AF2)

"Take the medications continuously." (AF3)

"They recommended about medication and postpartum practices." (AF4)

"Live as usual and use a condom when having sex." (AF5)

"Take the medications continuously and punctually." (AF6)

"Stay healthy." (AF7)

"Have sufficient food and abstain from fermented food." (AF8)

2.4 Postpartum symptoms after receiving antiretroviral medicines

After received the antiretroviral medicines, there was no postpartum disorders happened with all informants.

3. Breastfeeding

All of the informants didn't breastfeed their babies but they did feed them with formula milk instead which was given by the social work at Roi-Et Hospital, Roi-Et.

4. Self-Care problems

All informants didn't have any self-care problems.

5. Future plan

Every informant addressed about their future plans as shown below;

"I will go to work after my child grows up." (AF1)

"I don't have any plan, just stay day by day." (AF2, AF3)

"Take care of myself and my child as the doctors and nurses recommended." (AF4, AF6)

"I want to continue my education and work." (AF5)

"I want to have a long life and happiness, and do everything for my children." (AF7)

"Be healthy to stay away from complications." (AF8)

4.3 Part 3: Six self-care aspects of both informant groups

Aspect 1: Adequate food, water and air

HIV/AIDS-infected informant group

1.1 Food

All informants took care themselves properly by intaking complete 5 nutrients i.e. rice, meat, milk, eggs, vegetables, and fruit. Only three informants (AF1, AF2, and AF3) abstained from fermented food and one informant (AF8) abstained from tea and coffee.

1.2 Water

Five informants bought bottled water for drinking, two informants drank rainwater, and the other two informants drank filtered water. They drank water 4-10 glasses a day. Tap water was used in their daily cleaning.

1.3 Air

Most informants' houses had good atmosphere with fresh air. Only three informants lived in rental houses which had stuffy atmosphere. (AF5, AF7, AF8)

Non-infected informant group

1.1 Food

All informants took care themselves properly by eating complete 5 nutrients i.e. rice, meat, milk, eggs, vegetables, and fruit. Only three informants (F1, F5, and F6) avoid having some food as shown below;

"Do not eat fat food and soda which make me fat." (F1)

"Do not eat fermented fish because it can cause itchy at the wound from Caesarean section." (F5)

"Stop eating sweet food that makes me fat." (F6)

1.2 Water

Five informants drank rainwater. One informant bought bottled water for drinking, and the rest one informants drank filtered water. They drank water 4-10 glasses a day. Tap water was used in their daily cleaning.

1.3 Air

All informants lived in houses with good atmosphere and fresh air in countryside area.

Comparing the eating behavior of both groups, it was found that all informants fully had 5 nutrients to increase immunity and be healthy. However, informants from each group avoided eating different kinds of food. The HIV/AIDS-infected informants abstained from all kinds of fermented foods, tea and coffee. Meanwhile, the non-infected informants would abstain from fat and sweet food which caused obesity, or any kinds of food they believed that those could affect on their surgical wound.

Aspect 2: Excretion

HIV/AIDS-infected informant group

2.1 Urination

The informants mostly urinated 3-6 times a day; the urine color was yellow as usual.

2.2 Bowel movement

The informants mostly excreted 1-3 times a day approximately; they excreted normal lumps, and the feces turned black during the antiviral medication.

2.3 Constipation

All informants didn't have any constipation problems.

Non-infected informant group

2.1 Urination

The informants mostly urinated 3-6 times a day; the urine color was yellow as usual.

2.2 Bowel movement

The informants mostly excreted 1-3 times a day approximately; the feces were excreted in the normal lump.

2.3 Constipation

All informants didn't have any constipation problems.

In summary, the different excretion behaviors between the two informant groups were not much. Only black feces were found during antiviral medication in the HIV/AIDS-infected group.

Aspect 3: Activity/Rest

HIV/AIDS-infected informant group

3.1 Daily activities

The informants had their daily activities as below;

"I always cook, wash clothes, watch TV and take care of my child." (AF1, AF2, AF5, AF6, AF7, AF8)

"Take care of my child and sing songs." (AF3)

"Take care of my child, do house works and prepare selling stuff" (AF4)

3.2 Rest

The informants took a rest about 5-10 hours a day: 1-2 hours at day time (3 informants only), and 5-8 hours at night time.

3.3 Sleeping problems

Most of the informants didn't have any sleeping problems. Only two of them had the problem due to frustration and exhaustion from lack of sleep since their baby frequently woke up at night.

3.4 Sleeping pill use

No sleeping pills were used by the informants though having sleeping problems.

Non-infected informant group

3.1 Daily activities

The informants had their daily activities as below;

"I always take care of my child, do some house works, and watch TV." (F1, F2, F3, F4, F5, F6, F7)

"Take care of my child, listen to music, and read books." (F8)

3.2 Rest

The informants took a rest about 6-10 hours a day: 1-2 hours at day time (4 informants only), and 6-8 hours at night time.

3.3 Sleeping problems

All of the informants didn't have any sleeping problems.

3.4 Sleeping pill use

No sleeping pills were used by the informants though having sleeping problems.

The sleeping behaviors of both informant groups were not differences.

Aspect 4: Solitude and social interaction

HIV/AIDS-infected informant group

4.1 Members of family

In the key informant's families, there were 3-6 people approximately. Seven people were from nuclear families while the other one were from extended family (AF1).

4.2 Relationship in families

Most of the key informants had a loving, caring and warm relationship in their families. There was only one informant that sometimes had a quarrel with her husband due to his quick temper (AF7).

4.3 Child- raising assistants

Most key informants had someone in their family to help them raise and take care of their children such as their parents, sisters, or husbands. There was only an informant who had no helpers (AF7).

4.4 Participation in community's activities

Out of the key informants, four people did not participate in any activities of communities; while, the other four did as follows:

"Whenever events were hold in my community, I always went and helped other people to fold paper birds." (AF1)

"When having activities in my community, I always shared merit making or did some pieces of work for festivals." (AF3, AF6)

"I participated in my community development trainings." (AF4)

Non-infected informant group

4.1 Members of family

Out of the key informants, four of them were from nuclear families while the other four were from extended families. There were 3-10 members in the informants' families approximately.

4.2 Relationship in families

All key informants of this group had a warm, loving, and caring relationship in their families.

4.3 Child- raising assistants

Most of the key informants had someone in the family including their mothers, sisters, daughters, and husbands to help them raise and take care of their children except two of the informants who had none (F3, F7).

4.4 Participation in community's activities

According to the data, there were five informants who did not participate in their communities' activities; whereas, the other three joined the activities as follows:

> "I always shared merit making or did some pieces of work for festivals when events or activities were hold in my community." (F6, F9)
>
> "I joined helping my community development in cleaning."(F8)

Due to a comparison of the informants' self-care behaviors on solitude and social interaction, some differences were found as follows:

Group of the informants who was infected by the HIV/AIDS were mainly from nuclear family type; while, the ones who were not infected by the HIV/AIDS were from extended families.

Family relation of the informants with the HIV'AIDS infection sometimes had a quarrel with their family members; whereas, the informants without the infection had a good relationship within their families.

Both groups of the key informants had someone in their families to help them raise their children except 2 informants who were not infected by the HIV/AIDS.

In activity's participation, it was found that the group of informants who were suffered from the HIV/AIDS infection more participated in their communities' activities than the other one.

Aspect 5: Prevention of hazard

HIV/AIDS-infected informant group

5.1 Breastfeeding

Every key informant did not breastfeed their babies. Out of them, supplementary food was fed together with milk by an informant. The reasons for the supplementary food feeding were:

"When my baby reached a month of age, my mother-in-law fed him 1-2 spoonfuls of Serelac, supplementary food, so that he would feel full and did not bother us by his crying. It was the way she has fed her children so I could not offend it even I was afraid that my child would get flatulence. Fortunately, there was nothing wrong with him. I stopped feeding him with that now and will start feeding him again when he is 6 months of age."(AF8)

5.2 Getting medication

After birth delivery, the medicines would be given to all of the key informants according to a guideline for newly mothers of Roi-Et Hospital. Here are lists of the given medicines dividing by method of delivery.

Mothers with natural childbirth would be medicated with:

Ferrous fumarate 1 x 3 pc.O = 100 Tab.
Paracetamal (500 mg.) 2x PRN.O = 20 Tab.

Mothers with Caesarean section would be medicated with:

Ferrous fumarate 1x3pc.O = 100 Tab.
Paracetamal (500 mg.) 2x PRN.O = 20 Tab.
Amoxycillin (500 mg.) 1x 4pc.O x 7 days ; or 2x 2pc.O x 7 days

From the guideline for mothers after delivery, the mothers will not be taken for blood test except in case of having some complicated conditions such as Postpartum hemorrhage, and Anemia. In case of the key informants, blood check after birth giving will not be taken.

5.3 Contraception

There were 5 of the key informants getting birth control after delivery. On the contrary, there was no contraception in the other 3 because they got divorced and refused to do it. Here were what the informants with birth control said:

"I started taking contraceptive pills after postpartum check up and medication a month and a half later, and didn't get any complications." (AF2)

"I took contraceptive pills and used condoms after finishing postpartum check up for a month and a half. There was no complication found." (AF3)

"We did sterilization and didn't get any complications." (AF4, AF7, AF8)

Non-infected informant group

5.1 Breastfeeding

Out of all informants, there were 3 of them raising their babies with breastfeeding together with milk compound and supplementary food 3 months after

birth giving, 4 informants breastfed their babies for at least 6 months without supplementary food, and only an informants who had no child raising time due to neonatal death caused by preterm birth. The reasons for feeding children with supplementary food were:

> "After breastfeeding for 3 months long, I started feeding my baby together with Serelac supplementary food because he was often hungry and cried out loud." (F3, F5, F6)

5.2 Getting medication

All of the key informants would be medicated the same way as the HIV/AIDS-infected group of informants with medicines after childbirth following Roi-et Hospital's guideline.

5.3 Contraception

There were 6 key informants getting birth control after delivery; while, 2 informants had no contraception because they did not want to. Here was what the group of informants who got birth control said:

> "I took contraceptive pills. They were started taken after finishing postpartum check up for a month and a half long. There was no complication after using them." (F3, F8)
>
> "I took contraceptive pills and used condoms after postpartum check up a month and a half later. I didn't get any complications." (F6)
>
> "I was sterilized after birth delivery. It had no complications on me." (F1, F5)
>
> "I used condoms and didn't get any complications." (F7)

When comparing the informants' self-care behaviors on prevention of hazard, it was obviously found differences between the 2 groups in breastfeeding. That is to say, all of the HIV/AIDS-infected informants would not breastfeed their children. Even those non-HIV/AIDS-infected informants themselves wanted to breastfeed their children, the supplementary food would be added for feeding the children before they reached the age of 6 months.

In contraception section, it was found that two HIV/AIDS-infected informants had no contraception which could be a risk factor of the HIV virus transmission and more infection.

Aspect 6: Promotion of normality

HIV/AIDS-infected informant group

6.1 Life satisfaction

From the data, 7 key informants were satisfied with their living lives with happiness, no tension, and understanding of their husbands. There was only one who was worried about her infection.

6.2 Appointed medical examination

7 key informants were examined clinically once after 6 weeks of birth delivery at Roi-Et Hospital, Roi-Et. After the medical examination, no disorder

symptoms were found so there was no appointed examination again. Just an informant was examined three times because of her sterilization after delivery. It was thus important to go for her surgical wound examination at neighboring health center, and returned to Roi-Et Hospital for rechecking up. If there was no disorder symptoms found, it was no need to make an appointment for examination once again.

Non-infected informant group

6.1 Life satisfaction

All informants live their lives happily with their family.

6.2 Appointed medical examination

Seven key informants were examined clinically once after 6 weeks of birth delivery at Roi-Et Hospital, Roi-Et. After the medical examination, no disorder symptoms were found so there was no appointed examination again. Just an informant was examined twice because of her sterilization after delivery. It was thus important to go for her surgical wound examination at neighboring health center, and returned to Roi-Et Hospital for rechecking up. If there was no disorder symptoms found, it was no need to make an appointment for examination once again.

In comparison of the informants' self-care behaviors on prevention of normality, it was found that the HIV/AIDS-infected group was worried about the virus infection. However, the informants in this group were still satisfied with their lives when there was no disorder symptoms found after the postpartum checking up or even no examinations after delivery.

4.4 Part 4: Postpartum behaviors in mothers

Table3:Percentage of postpartum behaviors in mothers on rest, work, and diets

Assessment Lists	HIV/AIDS-Infected informants		Non-HIV/AIDS-Infected informants	
	Yes	**No**	**Yes**	**No**
1. Rest: Taking enough rest was needed after 2 weeks of childbirth. In the first 6 weeks of postpartum period, hard work including carrying heavy things and going updownstairs which could impact pelvic viscera and perineum wound was not allowed for postpartum mothers.				
1.1 7-8 hrs. for night-time	87.5	12.5	50.0	50.0
1.2 1-2 hrs. for day-time	75.0	25.0	62.5	37.5
2. Working: In the first 2 weeks of delivery, some light housework could be done. Later, harder work was allowed to do little by little. When it reached 6 weeks, usual work would be allowed then.	100.0	0	100.0	0
3. Diet: Mothers needed nutrient food which were:				
3.1 Meat, beans, and eggs	100.0	0	100.0	0
3.2 Flour or rice	100.0	0	100.0	0
3.3 All kinds of fruit and vegetable	100.0	0	100.0	0
3.4 8-10 glasses of milk and fresh water	100.0	0	100.0	0
3.5 Strong food, fermented food, tea, coffee and alcoholic drinks i.e. herbal liquor or haemagogue are not allowed.	100.0	0	100.0	0

According to Table 3, it showed that the HIV/AIDS-infected informants took more rest than those of non-infected informants, but no differences found in their behaviors on work and having meals.

Table 4: Percentage of postpartum behaviors in mothers on keeping body clean

Assessment lists	HIV/AIDS-infected informants		Non-HIV/AIDS-infected informants	
	Yes	**No**	**Yes**	**No**
4. Cleanliness				
4.1 Taking a bath twice a day: in the morning and evening	100.0	0	100.0	0
4.2 Hair washing 2-3 times/ week	100.0	0	100.0	0
4.3 Short nail cut and clean clothes wearing	87.5	12.5	100.0	0
5. Breast and nipple cleaning				
5.1 Cleaning breasts during bath time and wiping dirt or dried milk off the nipples for cracked nipples protection.	100.0	0	100.0	0
5.2 Wearing support bras	75.0	25.0	87.5	12.5

Table 4 showed that the HIV/AIIIDS-infected informants kept their bodies, breasts, and nipples cleaner than those of non-infected informants.

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Table.5: Percentage of postpartum behaviors in mothers on keeping clean of external genital organ and sexual intercourse

Assessment lists	HIV/AIDS-infected informants		Non-HIV/AIDS-infected informants	
	Yes	No	Yes	No
6. External genital organ				
6.1 Cleansing with soap or clean water	100.0	0	100.0	0
6.2 Wiping backwards till dry after urination and excretion	100.0	0	100.0	0
6.3 Always wearing sanitary napkin and changing every 4-6 hrs.	100.0	0	100.0	0
7. Sexual intercourse				
7.1 No sexual intercourses until the postpartum examinations after 6 months of delivery were conducted.	87.5	12.5	162.5	37.5
7.2 Consultation with husband on contraception before postpartum examination at the hospital	62.5	37.5	87.5	12.5

Table 5 indicated that there was no difference between the 2 groups in keeping clean of external genital organ. In sexual intercourse, keeping clean are more conducted in the HIV/AIDS –infected informants; whereas, contraception were more conducted in those of non-infected informants.

Table.6: Percentage of postpartum behaviors in mothers on medicine taking, Birth control planning, and mental health

Assessment lists	HIV/AIDS-infected informants		Non-HIV/AIDS-infected informants	
	Yes	No	Yes	No
8. Medication: Taking Continuously during the period of treatment				
8.1 Ferrous fumarate(the red Tab.) 1 tablet, 3 times /day after meals	100.0	0	100.0	0
8.2 Paracetamal 500mg. (the white Tab.) 2 tablets, after meals / 3 times/ day, or whenever some pain in wound or uterus occurred, taken every 4 hrs.	100.0	0	100.0	0
9. Family planning: Waiting until the current child reach 2 years of age for next pregnancy. During the time, temporary contraception was preferred. If there were enough children in the family, sterilization was needed.	50.0	50.0	87.5	12.5
10. Psychological health: Less tension was needed to avoid weakness that reflects lack of breast milk in mothers. (Breast milk quantity and weight gained in children should be investigated.)	50.0	50.0	100.0	0

From Table.6, it was found that there was no differences in taking ferrous fumarate (the red tablet) between both groups of informants; while, painkilling medicines were more taken by the HIV/AIDS-infected informants. In birth control planning and mental health, they were more practiced by those non-infected informants.

Table.7: Percentage of postpartum behaviors in mothers on postpartum exercises, unusual symptoms that need coming to hospitals, and breastfeeding

Assessment lists	HIV/AIDS-infected informants		Non-HIV/AIDS-infected informants	
	Yes	**No**	**Yes**	**No**
11. Exercises:				
11.1 Mothers with natural Childbirth: Exertion should be started after 24 hrs of delivery.	75.0	25.0	100.0	0
11.2 Mothers with Caesarean section: Postpartum exercises should be started after surgical wound are healed up or a month later. Abdominal and pelvic floor muscles must be completely recovered in this case.	100.0	0	100.0	0
12. Disorder symptoms to come to hospitals				
12.1 Having a fever, a severe headache and blurred vision	100.0	0	100.0	0
12.2 Coming out of amniotic fluid with a bad smell and bright red-color mix	100.0	0	100.0	0
12.3 Getting inflammation in breasts or perineum	100.0	0	100.0	0
12.4 Having pain and swelling in calf	100.0	0	100.0	0
12.5 Frequent urination and feeling a sharp sore during urination	100.0	0	100.0	0
13. Breastfeeding : 6 months of breastfeeding without any supplementary	0	100.0	62.5	37.5

Table 7 indicated that postpartum exercises after normal labor were more practiced in the HIV/AIDS non-infected informants than those infected ones, but there was no differences in postpartum exercises after Caesarean section between the two groups.

For disorder symptoms that need coming to hospitals, it was no differences found in both groups.

For breastfeeding, the group of non-HIV/AIDS-infected informants was found raising children with breastfeeding more than the infected one.

CHAPTER V

CONCLUSION AND RECOMMENDATIONS

The quantitative study based on the phenomenological approach was designed to compare the 8 HIV-infected mothers' behaviors and the other 8 non-infected mothers' at Roi-Et Hospital, Roi-Et province. The details are summarized herein in this chapter.

Research objective

To compare how self-care behavior of HIV/AIDS-infected mothers differs from that of non-infected mothers.

Hypothesis

Self-care behavior of HIV/AIDS-infected mothers differs from that of non-infected mothers.

Research methodology

1. Population: The postpartum mothers who received the postpartum services at Roi-Et Hospital during March-April 2011

2. Subjects: Two groups of postpartum mothers were divided into 2 groups: 1) The study group which was 8 HIV-infected mothers who received postpartum services at social work division, and 2) The comparison group which was 8 non-infected mothers who received postpartum services at postpartum gynecology clinic.

Research instruments

The structured interviews used as instruments were developed by the researcher regarding Orem's Self-Care theory (Orem, 1981), source: 'Nursing Process: Theory and Application' by Suchitra Luangamonlert et al., Faculty of Public Health, KhonKaen University. Moreover, the postpartum behavior check-up list (source: 'The advice handbook of postpartum mother' by staff at the postpartum ward at Roi-Et Hospital, Roi-Et) was another instrument used in this study. The content validity of the instruments were checked by four experts and revised. Afterwards, the instruments were tried out with five patients excluding from the subjects. The reliability of the instruments based on KR-21 formula (Kuder Richardson) was at 0.70. The questions in the interviews were classified into four categories as follows:

Part 1: General Information (administered to both groups)

Part 2: HIV-Infected Motherhood (administered to the HIV – infected mothers)

Part 3: 6 Aspects of Mothers' Self-Care Behaviors (administered to both groups)

Part 4: 13 aspects of mothers' behaviors (administered to both groups)

Data analysis

1. Mean and percentage were employed in order to analyze the general information.

2. The 6 aspects of self-care behaviors were analyzed by the content analysis.

3. Percentage was used in order to analyze the 13 aspects of behaviors.

5.1 Conclusion

Part 1: General information

1. Personal information

All informants' ages were between 20-35 years old. Three of eight HIV/AIDS-infected informants were 30-34 years old (37.5%). Meanwhile, three non-infected informants were 25-29 years old (37.5%) and three of them were 30-34 years of age (37.5%).

Six of eight HIV/AIDS-infected informants were married (75%); two were divorced (25%). Seven non-infected informants were married (87.5%); only one informant in this group was divorced (12.5%). All of the informants have Thai nationality, Thai race, and Buddhist (100%).

2. Occupation, Education, and Domicile

Three of the HIV/AIDS-infected informants were employees (37.5%), followed by two housewives and two merchants (25% each) while five of non-infected informants worked as employees (62.5%), followed by two merchants (25%) and one housewife (12.5%).

The education level of most informants in both groups was secondary (87.5% each; 7 out of 8), only one person in each group finished elementary level (12.5%).

The domicile of the six HIV/AIDS-infected informants was in Muang district, Roi-Et (75%) and two of them were in other districts (25%). Five of non-infected informants' domiciles were in Muang district, Roi-Et (62.5%) and three of them lived in other districts (37.5%).

3. Pregnancy and current illness records

The percentages of delivery processes in both groups were similar. Five informants in both groups had delivered with normal labor process (62.5%), and three from both groups had delivered with Caesarean section process (37.5%).

Five of HIV/AIDS-infected informants have one child (62.5%), and three of them have two children (37.5%). Whereas, half of non-infected informants have two children (50%), three of them have one child (37.5%), and one has lost her child (12.5%).

Four HIV/AIDS-infected informants were pregnant twice (50%), three were pregnant once (37.5%), and one was pregnant three times (12.5%). Whereas three of the non-infected informants were pregnant once (37.5%), two were pregnant twice and the other two were pregnant three times (25% each).

Four HIV/AIDS-infected informants were delivered once (50%) and twice for the other four (50%). Among the non-infected informants, three were delivered once (37.5%), and five were delivered twice (62.5%). Six out of eight (75%) in each group had never had an abortion, and two of each had an abortion once (25%).

4. Family illness records

No family illness was found in seven HIV/AIDS-infected informants' records (87.5%); only one of them had a family member was ill (12.5%). While five of non-infected informants had no family illness records (62.5%), and three of them had the records (37.5%).

5. Knowledge gained during pregnancy at antenatal clinics

Both informant groups gained knowledge during their pregnancy. The HIV/AIDS-infected group was given knowledge focusing on nutritious food and eating behaviors, followed by HIV/AIDS-antivirus medicine taking, non breastfeeding during postpartum period, and physical disorder symptoms.

Meanwhile, the non-infected group was also given knowledge focusing on nutritious food and eating behaviors, followed by delivery preparation, breastfeeding, and physical disorder symptoms respectively.

Part 2: Information of the HIV/AIDS-infected informants

1. During pregnancy

1.1 Self-care

Each informant had different self-care behaviors such as having 5 nutrients, having adequate rest, avoiding stresses, being optimistic, taking medicines on time as recommended, using a condom when having sex, not having sex with others except their own husbands and not drinking alcohol.

1.2 Antiretroviral medication

All HIV/AIDS-infected informants were given antiretroviral medicines during their pregnancy after they had been blood checked and confirmed as HIV/AIDS-infected. Seven informants took the medicines during their 4-7 months pregnancy. Only one informant took the medicines before her pregnancy due to the preceding HIV/AIDS-infection. Five informants could not remember the medicines' names, but they knew exact time to take the medicines which was every 12 hours, at 8 a.m. and 8 p.m. Furthermore, three of them could remember the medicines' names which were AZT and GPO-via.

1.3 Doctors' or nurses' recommendations

Most of recommendations were given by the head nurse of the HIV/AIDS section at the antenatal clinic. After received blood-check results, the head nurse sent reports to a doctor for diagnosis and gave some advices to patients such as taking medicines on time, not being stressful, taking a better care of themselves in order to avoid any complications, not having sex with many men, not breastfeeding since they would be given formula milk by the hospital for a year.

1.4 Symptoms after receiving antiretroviral medicines

There was no disorder symptoms happened with 6 informants after received the antiretroviral medicines, but two informants found that their legs and arms were smaller than before. Moreover, their skin looked healthier as well.

2. Postpartum Period

2.1 Self-Care

The informants took care of themselves carefully by avoiding stresses, acknowledged themselves as an HIV/AIDS-infected patient, stay healthy and taking medicines continuously.

2.2 Antiretroviral medication

After delivery, all of the informants were given the antiretroviral medicines immediately till 2 weeks.

2.3 Doctors' or nurses' recommendations

All of the informants were given recommendations especially on taking medicines continuously, stresses and postpartum behaviors.

2.4 Postpartum symptoms after receiving antiretroviral medicines

There was no postpartum disorders happened with all informants after received the antiretroviral medicines.

3. Breastfeeding

All of the informants didn't breastfeed their babies but they did feed them with the formula milk, which was given by the social work at Roi-Et Hospital, Roi-Et, instead.

4. Self-Care Problems

All informants didn't have any self-care problems.

5. Future Plan

Every informant had planned their future differently such as continue working when they grow up, taking care of themselves and their children as recommended, further studying and work, having a long life and happiness, avoiding complications; however, there were some who had planned nothing and live their lives aimlessly.

Part 3: Six Self-care aspects of both informant groups

Aspect 1: Adequate food, water and air

HIV/AIDS-infected informant group

1.1 Food

All informants took care themselves properly by having complete 5 nutrients i.e. rice, meat, milk, eggs, vegetables, and fruit. Only three informants abstained from fermented food and one informant abstained from tea and coffee.

1.2 Water

Five informants bought bottled water for drinking, two informants drank rainwater, and the other two informants drank filtered water. They drank water 4-10 glasses a day. Tap water was used in their daily cleaning.

1.3 Air

Most informants' houses had good atmosphere with fresh air. Only three informants lived in rental houses which had stuffy atmosphere.

Non-infected informant group

1.1 Food

All informants took care of themselves properly by eating complete 5 nutrients i.e. rice, meat, milk, eggs, vegetables, and fruit. Only three informants avoided having some kinds of food such as fat food and soda which would make them fat, fermented fish which could cause itchy at the wound from Caesarean section, and sweet food which makes them fat.

1.2 Water

Five informants drank rainwater. One informant bought bottled water for drinking, and the rest one informants drank filtered water. They drank water 4-10 glasses a day. Tap water was used in their daily cleaning.

1.3 Air

All informants lived in houses with good atmosphere and fresh air in countryside area. Their houses are surrounded by trees and fields.

Aspect 2: Excretion

HIV/AIDS-infected informant group

2.1 Urination

The informants mostly urinated 3-6 times a day; the urine color was yellow as usual.

2.2 Bowel movement

The informants mostly excreted 1-3 times a day approximately; they excreted normal lumps, and the feces turned black during the antiviral medication.

2.3 Constipation

All informants didn't have any constipation problems.

Non-infected informant group

2.1 Urination

The informants mostly urinated 3-6 times a day; the urine color was yellow as usual.

2.2 Bowel movement

The informants mostly excreted 1-3 times a day approximately; the feces were excreted in the normal lump.

2.3 Constipation

All informants didn't have any constipation problems.

Aspect 3: Activity/Rest

HIV/AIDS-Infected informant group

3.1 Daily activities

The informants had their daily activities such as doing house works, taking care of their children, singing and preparing selling stuff.

3.2 Rest

The informants took a rest about 5-10 hours a day: 1-2 hours at day time, and five informants had 5-8 hours at night time only.

3.3 Sleeping problems

Most of the informants didn't have any sleeping problems. Only two of them had the problem due to frustration and exhaustion from lack of sleep since their baby frequently woke up at night.

3.4 Sleeping pill use

No sleeping pills were used by the informants though having sleeping problems.

Non-infected informant group

3.1 Daily activities

The informants had their daily activities such as taking care of their children, doing house works, singing and reading.

3.2 Rest

The informants took a rest about 6-10 hours a day: 1-2 hours at day time, and four informants had 6-8 hours at night time.

3.3 Sleeping problems

All of the informants didn't have any sleeping problems.

3.4 Sleeping pill use

No sleeping pills were used by the informants though having sleeping problems.

Aspect4: Solitude and social interaction

HIV/AIDS-Infected informant group

4.1 Members of family

In the key informant's families, there were 3-6 people approximately. Seven people were from nuclear families while the other one was from extended family.

4.2 Relationship in families

Most of the informants had a loving, caring and warm relationship in their families. There was only one informant that sometimes had a quarrel with her husband due to his quick temper.

4.3 Child- raising assistants

Most informants had someone in their family to help them raise and take care of their children such as their parents, sisters, or husbands. There was only an informant who had no helpers.

4.4 Participation in community's activities

Out of the key informants, four people did not participate in any activities of communities; while, the other four did such as folding paper birds, making merit, doing some pieces of work for festivals and participating in their community development trainings.

Non-infected informant group

4.1 Members of family

Out of the key informants, four of them were from nuclear families while the other four were from extended families. There were 3-10 members in the informants' families approximately.

4.2 Relationship in families

All key informants of this group had a warm, loving, and caring relationship in their families.

4.3 Child- raising assistants

Most of the key informants had someone in the family including their mothers, sisters, daughters, and husbands to help them raise and take care of their children except two of the informants who had none.

4.4 Participation in community's activities

There were five informants who did not participate in any communities' activities; whereas, the other three joined the activities such as making merit, doing some pieces of work for festivals and helping their community development in cleaning.

Aspect 5: Prevention of hazard

HIV/AIDS-Infected informant group

5.1 Breastfeeding

Every informant did not breastfeed their babies. Supplementary food was fed together with milk by only one informant since her mother-in-law did not want to be bothered by his crying

5.2 Getting medication

After birth delivery, the medicines would be given to all of the informants according to the advice handbook for postpartum mothers at Roi-Et Hospital. Mothers will not be taken for blood test except in case of having some complicated conditions such as postpartum hemorrhage, and Anemia. In case of the informants, blood check at postpartum period would not be taken.

5.3 Contraception

There were five of the informants getting birth control after delivery. On the contrary, there was no contraception in the other three because they got divorced and refused to do it. Methods of contraception used were taking contraceptive pills, using condoms and doing sterilization.

Non-infected informant group

5.1 Breastfeeding

There were three of all informants raised their babies with breastfeeding together with milk compound and supplementary food for three months after delivery, four informants breastfed their babies for at least 6 months without supplementary food, and only one informants who had no child raising time due to neonatal death caused by preterm birth. The reason why using supplementary food was that the baby was hungry frequently and cried in the first three months.

5.2 Getting medication

All of the key informants would be medicated the same way as the HIV/AIDS-infected group of informants with medicines after childbirth following Roi-Et Hospital guideline.

5.3 Contraception

There were 6 key informants getting birth control after delivery; while, 2 informants had no contraception because they did not want to. Methods of contraception used were taking contraceptive pills, using condoms and doing sterilization.

Aspect 6: Promotion of normality

HIV/AIDS-Infected informant group

6.1 Life satisfaction

From the data, seven informants were satisfied with their living lives with happiness, no tension, and understanding of their husbands. There was only one who was worried about her infection.

6.2 Appointed medical examination

Seven informants took postpartum examination once after birth delivery at Roi-Et Hospital, Roi-Et. After the medical examination, no disorder symptoms were found so there was no appointed examination again. Just an informant was examined three times because of her sterilization after delivery. It was thus important to go for her surgical wound examination at neighboring health center, and returned to Roi-Et Hospital for rechecking up. It was found that there was no disorder symptoms found, so it was no need to make an appointment for examination once again.

Non-infected informant group

6.1 Life satisfaction

All informants live their lives happily with their family.

6.2 Appointed medical examination

Seven key informants took postpartum examination once after 6 weeks of birth delivery at Roi-Et Hospital, Roi-Et. After the medical examination, no disorder symptoms were found so there was no appointed examination again. Just an informant was examined twice because of her sterilization after delivery. It was thus important to go for her surgical wound examination at neighboring health center, and returned to Roi-Et Hospital for rechecking up. It was found that there was no disorder symptoms found, so it was no need to make an appointment for examination once again.

Part 4: Postpartum behaviors in mothers

The comparison of 13 aspects of mother's behaviors between the two groups: the HIV/AIDS-infected and the non-infected groups, are presented as follows:

1. Rest: Taking enough rest was needed after two weeks of childbirth. In the first six weeks of postpartum period, hard works including carrying heavy things and going up-downstairs which could impact pelvic viscera and perineum wound were not allowed for postpartum mothers. Besides, it was found that the HIV/AIDS-infected informants took more rest than those of non-infected informants.

2. Work: In the first two weeks of delivery, some light housework could be done. Later, harder work was allowed to do little by little. When it reached six weeks, usual work would be allowed then.

3. Diet: Mothers needed nutritious foods which are meat, beans, eggs, flour or rice, fruit, vegetable, milk and 8-10 glasses of water. However, there was some food which should avoid such as strong food, fermented food, tea, coffee and

alcoholic drinks i.e. herbal liquor or haemagogue. It was found that there were differences found in their behaviors on having meals between the HIV-infected mothers and the non-infected mothers.

4. Keeping Clean of the body: For bath taking twice a day in the morning and evening, hair washing 2-3 times/week and short nail cut and clean clothes wearing, it revealed that the non-HIV/AIIIDS-infected informants kept their bodies cleaner than those of infected informants.

5. Breast and nipple cleanse: For cleaning breasts during bath time and wiping dirt or dried milk off the nipples for cracked nipples protection, and wearing support bras, it showed that the non-HIV/AIDS-infected informants kept their bodies, breasts, and nipples cleaner than those of the infected informants.

6. Keeping Clean of external genital organ: There was no differences found in the two groups' cleansing with soap or clean water, wiping backwards till dry after urination and excretion, and wearing sanitary napkin and changing every 4-6 hrs.

7. Having sexual intercourse: For no sexual intercourses until the postpartum examinations after six months of delivery, and consultation with husband on contraception before postpartum examination at the hospital, it indicated that the HIV/AIDS –infected informants kept cleaner than those of the non-infected informants.

8. Medicine taking: It was found that there was no differences in taking Haematic tonic (the red tablet: 1tablet, after meals /3 times /day) between both groups of informants; while, painkilling medicines (the white Tab.: 2 tablets, after meals / 3 times/ day, or whenever some pain in wound or uterus occurred, taken every 4 hrs.) were more taken by the HIV/AIDS-infected informants.

9. Birth control: They would wait until the current child reached two years of age for next pregnancy. During the time, temporary contraception was preferred. If there were enough children in the family, sterilization was needed. In birth control planning, they were more practiced by those non-infected informants.

10. Mental health: Less tension was needed to avoid weakness that reflects lack of breast milk in mothers. (Breast milk quantity and weight gained in children should be investigated.) In mental health, they were more practiced by those non-infected informants.

11. Postpartum exercises: For mothers with normal labor, exertion should be started after 24 hrs of delivery and for mothers with Caesarean section, postpartum exercises should be started after surgical wound are healed up or a month later. Abdominal and pelvic floor muscles must be completely recovered in this case. It revealed that postpartum exercises after normal labor were more practiced in the HIV/AIDS non-infected informants than those infected ones, but there was no differences in postpartum exercises after Caesarean section between the two groups.

12. Unusual symptoms that need coming to hospitals: Having a fever, a severe headache and blurred vision, coming out of amniotic fluid with a bad smell and

bright red-color mix, getting inflammation in breasts or perineum, having pain and swelling in calf, and frequent urination and feeling a sharp sore during urination

For disorder symptoms that need coming to hospitals, it was no differences found in both groups.

13. Breastfeeding: For six months of breastfeeding without any supplementary food, the group of non-HIV/AIDS-infected informants was found raising children with breastfeeding more than the infected one.

5.2 Discussion

This study was conducted to compare similarities and differences of self-care behaviors of postpartum HIV/AIDS-infected mothers to non-infected mothers. The results and analysis divided into four parts were presented as the followings:

Part 1: General Information
Part 2: Information of the HIV/AIDS-Infected Informants
Part 3: 6 Self-Care Aspects Behaviors
Part 4: 13 Aspects of Postpartum Mothers' Behaviors

Part 1: General information

The subjects' ages in this study were mostly between 30-34 years old (37.5%), and followed by 25-29 year-old-mothers. This is consistent with the report on the HIV-infected patients' age range released by the Epidemiological Information Center, Bureau of Epidemiology, Department of Disease Control, Ministry of Health, that the majority of HIV-infected patients are 30-34 years old (25.86%) and followed by 25-29 year-old patients.

Furthermore, two of eight HIV/AIDS-infected informants were divorced. They believed they could not take care of themselves and their husbands as well as they used to when they were not infected, so they moved to live with their parents. For the non-infected informants, only one of those in the group was divorced because of controversial attitudes with her husband.

Not only the HIV/AIDS-infected informants but also the non- infected were working as employees the most, similar to the report released by the Epidemiological Information Center that employees were considered as the most HIV/AIDS-infected patients. However, it was found that other factors such as education level, nationality and religion were not different within both groups.

Part 2: Information of the HIV/AIDS-Infected informants

The self-care behaviors of the HIV/AIDS-infected informants in pregnancy and postpartum periods are described in this following section. Moreover, it revealed the different behaviors practiced by those mothers.

During pregnancy

The informant had different self-care behaviors such as having 5 nutrients, having adequate rest, avoiding stresses, taking medicines on time as recommended,

using a condom when having sex, and not drinking alcohol. In terms of antiretroviral medication, all of the informants were firstly advised for blood checking. They were voluntarily checked up on virus. Seven informants took the medicines during their 4-7 months pregnancy and another one informant took the medicines before her pregnancy due to the preceding HIV/AIDS-infection. Three of the informants could remember the medicines' names which were AZT and GPO-via. There was a study focusing on antivirus medicine in pregnant mothers in order to avoid mother-to-child transmission of HIV. The study was authorized under the project 'Perinatal HIV Prevention Trial, Thailand-PHPT-2'. It was reported that this medication reduced mother-to-child HIV transmission into 2%. In addition, Nutawan Chantanakorn and Ruengrudee Weerawongphom's (2007) study on 'Perinatal HIV Transmission Rate in Phichit Province in 2002-2007' revealed that mother-to-child HIV transmission spread rate is at 2.3%. Most of recommendations were given by doctors and nurses of the HIV/AIDS section at the antenatal clinic. Nurses gave some advices to patients such as taking medicines on time, not being stressful, taking a better care of themselves in order to avoid any complications, and not breastfeeding since they would be given formula milk by the hospital for a year. There was disorder symptoms happened with two informants after received the antiretroviral medicines. They found that their legs and arms were smaller than before. Moreover, their skin looked healthier as well. However, in the previous research, there was no such side effects regarding the data from the informants. The frequent side effects found in the use of AZT were headache, insomnia, anorexia, nausea, disgorging and severe muscle and joint pains. The most often side effects found were anemia and leucocytes reduction. The HIV-infected pregnant patients received the antiretroviral medicines at the antenatal clinic, Roi-Et Hospital in Roi-Et province. The patients were firstly medicated at 14-month pregnancy. In case of preceding HIV/AIDS-infection, patients would receive GPO-via. Nevertheless, there was no such side effects of drug using; legs and arms got smaller and skin looked healthier, found in the previous research. Thus, side effects from this medication are still interesting to be further explored.

Postpartum period

The informants took care of themselves carefully by avoiding stresses, acknowledged themselves as an HIV/AIDS-infected patient, stay healthy and taking medicines continuously. They were given the antiretroviral medicines immediately and continuously after birth delivery for 2 weeks. Additionally, the informants were given recommendations especially on taking medicines continuously and on time. There was no postpartum disorders happened with all informants after received the antiretroviral medicines. They did not breastfeed their babies definitely, but they fed their babies with the formula milk, which was given by the social work in Roi-Et Hospital, Roi-Et, instead. Any self-care problems were not found. Most of the informants planned their future to continue working when their babies grow up, taking care of themselves and their children as recommended in order to avoid

complications, further studying, and earning their own and families; however, there were few of informants who planned nothing and live their lives aimlessly.

Part 3: Six Self-care aspects of both informant groups

The two groups' self-care behaviors are discussed in individual aspect as in the following:

Aspect 1: Adequate food, Water and air

All informants attempted to take care themselves properly by having complete five nutrients i.e. rice, meat, milk, eggs, vegetables, and fruit, abstaining from fermented food, tea, coffee, fat food, soda and sweet food which would make them fat, additionally, fermented fish which could cause itchy at the wound from Caesarean section was not allowed as well. They drank water approximately 4-10 glasses a day and used clean water such as tap water, filtered water and rainwater in their daily life. All informants lived in houses surrounded by trees and fields with good atmosphere and fresh air. This was consistent with Orapun Udomporn's (2007) study reported that HIV/AIDS-infected patients who received antivirus medication took care of themselves properly and avoided any kinds of food bringing about bad health.

Aspect 2: Excretion

The findings showed that all informants didn't have any constipation and urination problems. They approximately urinated 3-6 times a day; the urine color was yellow as usual. One of the HIV-infected informants excreted 1-3 times a day; the feces turned black during the AZT (Azidothymidine) - antiviral medication. However, in the previous research focusing on side effects of AZT, the often side effects found were headache, insomnia, anorexia, nausea, disgorging and severe muscle and joint pains. The most frequently found were anemia and leucocytes reduction (Tupairoh, 2006: 280). When the informants received the AZT, their feces turned black. It was because they consumed iron from the Obimin–AZ (Ferrous fumarate) during the pregnancy period or the Ferrous fumarate during the postpartum period. Side effects of taking the Ferrous fumarate were black or dark green feces, nausea, disgorging, diarrhea and becoming pale (Tupairoh, 2006: 450). Therefore, when informants simultaneously gained iron and antivirus medications from the AZT, they perceived that their feces would turn black. Nevertheless, from the researcher's experience, taking the Ferrous fumarate turned feces grey, not black or dark green. From this point, health care providers should advise patients about side effects of the Obimin –AZ or the Ferrous fumarate. The subjects in this study asserted that they were not informed about any side effects of drug use. Patients should be addressed side effects of drug use in order to avoid misunderstanding, especially in case of taking more than one kind of drug. Furthermore, studies on side effects of the Obimin–AZ or the Ferrous fumarate should be more conducted.

Aspect 3: Activity/Rest

Taking a rest about 12-24 hours should be practiced in the first postpartum period in order to relief exhaustion from birth delivery. Afterwards, patients should take a rest for 7-8 hours at night time, and 1-2 hours at day time. If insomnia occurred, any possible cause such as stress at postpartum period and physical illnesses should be found. The findings of the study showed that there was no differences among the two groups' daily activities; for example, doing housework, singing, preparing selling stuff, reading, 5-10 hours relaxing, 1-2 hours taking a nap at day time. These led patients produce more energy and both physical and mental health appeared.

Aspect4: Solitude and Social interaction

Solitude and Social interaction infer to how the informants took care of themselves and kept warm relationships with other intimates, especially their family members. Besides, they were physically and mentally ready to live together with neighbors, colleagues and communities, particularly in participation in community's activities; for instance, going to the temples with relatives in order to make merit and being a community volunteer. The finding of the study showed that most of the infected informants were from nuclear families rather than extended families. Due to their belief that being an HIV/AIDS-infected patient was considered as their own and family's stigma, they wanted to conceal the truth about their infection. Even though they wanted to disclose this secret to their parents, they thought they would better wait until they were sure that their parents could accept this kind of truth. On the other hand, the non-infected informants were mostly from nuclear families rather than extended families. Both infected and non-infected groups, nevertheless, had a warm, loving, and caring relationship in their families in a similar manner. Though they sometimes had a quarrel with husbands, it was just an ordinary behavior in living together in the same family. The informants had someone in the family including their parents, siblings, and husbands to help them raise and take care of their children. Furthermore, they participated in community's activities; they did such folding paper birds, doing some pieces of work for festivals and participating in their community development trainings and helping their community development in cleaning. This was also another way to maintain their good relationships between the informants and their neighbors.

Aspect 5: Prevention of hazard

Breast milk is the best natural source of nutrients for a baby since it completely contains all five nutrients. Simple reasons why to breastfeed babies with breast milk are the breast milk digests easily and it also consists of immunity. In addition, breastfeeding is more convenient since it is economical and no need of time for preparation and milk bottle washing. A baby should be breastfed at least six months and continued until the baby reaches two years of age. Although breastfeeding is undeniably good for a baby, the HIV/AIDS-infected informants fed their babies with the formula milk, which was given by the social work at Roi-Et

Hospital instead. On the contrary, the non- infected informants did breastfeed their babies with breast milk even some could not continue breastfeed until six months because they had to be back to work in Bangkok. This indicated that all infected mothers were aware of mother-to-child HIV transmission. They came to the hospital to be checked up at postpartum period and given the antivirus medication. It was consistent with Nutawan Chantanakorn and Ruengrudee Weerawongphom's (2007) study on 'Perinatal HIV Transmission Rate in Phichit Province in 2002-2007'. The results of the study found that 93.5% of HIV- infected mothers got pregnancy care, 57.50% got AZT (Zidovudine) during pregnancy for four weeks, and more than 86.9% got AZT on birth delivery. There were 178 children born with HIV-infected mothers (82.0%), and they were still alive. 84.1% were born with the method of normal labor. 15.9% were born by Caesarean section method. 60.4% got AZT for one week. 37.5% got AZT for six weeks. 80% got NVP (Nevirapine). 81.6% was followed up for HIV-infected children. One reason for children not having blood test (55.0%) was that they moved to a new place. The mother-to-child HIV spread rate was at 2.3%. For the contraception of the two groups of informants, the informants got birth control after delivery both permanently and temporarily.

Aspect 6: Promotion of normality

The appointed medical examination at postpartum period aimed at checking up the involution of reproductive organs and cervix cancer, and recommendations of contraception methods. This examination would be done after the delivery for six weeks in both groups of informants. The findings of the study disclosed that most of the informants were satisfied with their living lives with happiness, without tension and the medical examination at Roi-Et Hospital in Roi-Et province. There was no disorder symptoms found in these cases, so another appointed examination was not necessary.

Part 4: 13 Aspects of postpartum self-care behaviors

There was a significant difference obviously found in the two groups of mothers' self-care behaviors in the breastfeeding aspect, while slightly differences practiced by the two groups were found in the other 12 aspects.

Additionally, the findings of the study revealed that the age range of the HIV/AIDS-infected informants frequently found was 30-40 and most of them were employees. This was consistent with the report released by the Epidemiological Information Center, Bureau of Epidemiology, Department of Disease Control, Ministry of Health. The aspect of rest was the only one that contained no significant differences in the informants' behaviors since there were slightly differences in the rest aspects. The most significant difference was found in the breastfeeding aspect as mentioned above. That is, the HIV/AIDS-infected informants did not breastfeed their babies with their breast milk regarding the Thai Government policy that breastfeeding from any HIV/AIDS-infected mothers is not allowed in order to reduce mother-to-child HIV spread rate. Moreover, those mothers are given the formula milk until their

babies reach one year of age. For the non-infected informants, all of them breastfed their babies with breast milk, furthermore they fed supplementary food during this same period till their babies became 6 months old.

5.3 Recommendations

1. Academic implication

The findings showed that both two groups of informants took care of themselves properly due to the advices gained from the health care providers and the advice handbook for postpartum mothers. There was some misunderstanding about side effects of drug use - the AZT and the Ferrous fumarate. Health care providers at antenatal and postpartum clinics should become more aware of advices for patients. In addition, staff should emphasize on the abstention from the use of supplementary food with a baby younger than 6 months. For the social work division working on distributing formula milk to HIV/AIDS-infected mothers, it is found that some necessary information was missed such as patients' telephone numbers which were the most important information in case of emergency, public relations, and following up mother and child.

2. Nursing education

As the HIV/AIDS-infected mothers need closely continuous and long-term care, misunderstanding or inaccurate care leads HIV transmission from one to another, especially mother-to-child transmission. Therefore, teaching staff in nursing issue should provide trainings and academic conferences in order to enhance knowledge, skills and performances to practical nurses.

3. Further study

This study was based on the qualitative specifying in the postpartum mothers, thus further studies should be conducted with prenatal infected mothers and duration should be extended as well for more apparent information.

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APPENDICES

APPENDICES A

เครื่องมือการวิจัย

การเปรียบเทียบพฤติกรรมการดูแลตนเองระหว่างมารดาที่ติดเชื้อเอช ไอ วี/เอดส์ และมารดาที่ไม่ติดเชื้อเอช ไอ วี/เอดส์

แบบสัมภาษณ์ส่วนที่ 1 ข้อมูลทั่วไป ชุดที่……..

1. ข้อมูลส่วนบุคคล

ชื่อผู้ให้ข้อมูล(นามสมมุติ)……..อายุ …… ปี

สถานภาพสมรส ……เชื้อชาติ ……

สัญชาติ ……ศาสนา …..…….

อาชีพ ……..……ระดับการศึกษา……

ที่อยู่ อำเภอ……..จังหวัด…….

วันที่คลอด/วันที่ทำผ่าตัด ……การคลอด/การผ่าตัด ……...

2. ประวัติการเจ็บป่วยในปัจจุบันหรือการตั้งครรภ์ในปัจจุบัน

จำนวนครั้งของการตั้งครรภ์ (Gravida)……จำนวนครั้งของการคลอด (Parity)……

จำนวนครั้งของการแท้ง (Abortion)……จำนวนบุตรที่มีชีวิตทั้งหมด(Living)……

3. ประวัติการเจ็บป่วยในครอบครัว

……

……

……

……

……

4. ท่านได้รับความรู้เรื่องอะไรบ้างในระยะตั้งครรภ์ที่คลินิกฝากครรภ์

……...

……

……

……

……

แบบสัมภาษณ์ส่วนที่ 2 (สำหรับมารดาที่ติดเชื้อ เอช ไอ วี)

1. ระหว่างตั้งครรภ์ ให้ถามประเด็นต่อไปนี้

1) ท่านดูแลตนเองอย่างไร.....
.....
.....

2) ท่านได้รับยาต้านไวรัสหรือไม่

0. □ ไม่ได้รับ 1.□ ได้รับ

ครั้งแรกได้รับเมื่อไร.....

ชนิดยาที่ได้รับ.....

3) ท่านได้รับคำแนะนำจากแพทย์หรือพยาบาลว่าอย่างไร
.....
.....
.....
.....
.....

4) หลังจากรับยาแล้วมีอาการอย่างไร
.....
.....
.....
.....
.....

2. หลังคลอด ให้ถามประเด็นต่อไปนี้

1. ท่านดูแลตนเองอย่างไร……

.....

……..

2. ท่านได้รับยาต้านไวรัสหรือไม่

0. □ ไม่ได้รับ 1.□ ได้รับ

ครั้งแรกได้รับเมื่อไร.....

ชนิดยาที่ได้รับ.....

3. ท่านได้รับคำแนะนำจากแพทย์หรือพยาบาลว่าอย่างไร.

.....

……

……

4. หลังจากรับยาแล้วมีอาการอย่างไร

.....

…..……

……

3. ท่านให้นมลูกหรือไม่

0. □ ไม่ได้ให้ ลูกท่านรับประทานนมอะไร……รับจากที่ไหน.....

1. □ ให้ลูกดื่มนมตัวเอง เหตุผล.....

4. ท่านมีปัญหาในการดูแลสุขภาพหรือไม่ อย่างไร.....

5. ท่านวางแผนในอนาคตของตนเองอย่างไร……

แบบสัมภาษณ์ส่วนที่ 3

การประเมินสุขภาพตาม กรอบแนวคิดเกี่ยวกับการดูแลตนเองของโอเรม(Orem,981) 6 ด้าน

ด้านที่1 อาหาร น้ำและอากาศ (Adequate food ,water and air)

1.1 ท่านรับประทานอาหารครบ 5 หมู่คือ ข้าว เนื้อ นม ไข่ ผัก ผลไม้หรือไม่ ในแต่ละวัน มีอาหารที่ต้องงดหรือไม่อย่างไร……

……

1.2 ชนิดน้ำดื่มใช้น้ำอะไร……ดื่มน้ำวันละกี่แก้ว…….

1.3 สภาพอากาศบริเวณบ้านท่านเป็นอย่างไร……

ด้านที่ 2 การขับถ่าย (Excretion)

2.1 การขับถ่ายปัสสาวะวันละกี่ครั้ง……ลักษณะอย่างไร…..……

2.2 การขับถ่ายอุจจาระวันละกี่ครั้ง……ลักษณะอย่างไร……

2.3 ท่านมีปัญหาท้องผูกหรือไม่……...

ด้านที่ 3 การมีกิจกรรมและการพักผ่อน(Activity/ Rest)

3.1 กิจกรรมประจำวันทำอะไรบ้าง……..……..

3.2 การพักผ่อน นอนหลับวันละกี่ชั่วโมง……

กลางวันกี่ชั่วโม……กลางคืนกี่ชั่วโมง……..

3.3 มีปัญหาในเรื่องการนอนหลับหรือไม่……..……..

3.4 มีการใช้ยานอนหลับหรือไม่……

ด้านที่ 4 ความสันโดษและการเข้าสังคม(Solitude/Social interaction)

4.1 ครอบครัวท่านอาศัยอยู่กี่คน……

เป็นครอบครัวเดี่ยวหรือครอบครัวขยาย ……..

4.2 สัมพันธภาพของครอบครัวเป็นอย่างไร……

4.3 ใครช่วยท่านเลี้ยงลูก……

4.4 ท่านร่วมกิจกรรมของชุมชนอะไรบ้าง……..

ด้านที่ 5 การป้องกันอันตรายต่อชีวิตและสุขภาพ (Prevention of hazard)

5.1 การเลี้ยงลูกด้วยนมแม่

ท่านได้เลี้ยงลูกด้วยนมแม่หรือไม่……นานเท่าไร……..

ให้อาหารเสริมอะไร……

5.2 การรับยารักษา

ท่านได้รับยาหลังคลอดอะไรบ้าง……..

รับประทานยาอย่างไร……..

ต้องรับยาต่อเนื่องหรือไม่……..

ต้องตรวจเลือดหลังคลอดหรือไม่……

5.3 การคุมกำเนิด

หลังคลอดท่านได้คุมกำเนิดหรือไม่…….. วิธีใด……

เริ่มเมื่อไร……

มีภาวะแทรกซ้อนอย่างไร……

5.4 การตรวจเช็คมะเร็งปากมดลูก

หลังคลอดท่านตรวจเช็คมะเร็งปากมดลูกหรือไม่……..

ตรวจเมื่อไร……

พบอาการผิดปกติหรือไม่อย่างไร……

ด้านที่ 6 การดำรงชีวิตอย่างปกติสุข (Promotion of normality)

6.1 ท่านมีความพึงพอใจในชีวิตความเป็นอยู่ในสภาพปัจจุบันหรือไม่อย่างไร

……

6.2 การรับการตรวจตามนัด

ตั้งแต่หลังคลอดท่านได้รับการตรวจกี่ครั้งแล้ว……

ที่ไหนบ้าง……

เมื่อไร……..

ผลการตรวจเป็นอย่างไรบ้าง……..

นัดตรวจครั้งต่อไปเมื่อไร……

ที่มา: “ กระบวนการพยาบาลทฤษฎีและการนำไปใช้ ”

โดย สุจิตรา เหลืองอมรเลิศและคณะ คณะพยาบาลศาสตร์ มหาวิทยาลัยขอนแก่น

แบบสัมภาษณ์ส่วนที่ 4 แบบตรวจสอบการปฏิบัติตัวของมารดาหลังคลอด

ลำดับ	รายการประเมิน	ปฏิบัติ	ไม่ปฏิบัติ	หมายเหตุ
1.	การพักผ่อน ควรพักผ่อนมากๆใน 2 สัปดาห์แรกหลังคลอด ภายใน 6สัปดาห์แรกหลังคลอด ห้ามทำงานหนัก เช่น ยก แบก หาม ขึ้นลงบันไดซึ่งมีผลต่ออวัยวะภายในอุ้งเชิงกรานและแผลฝีเย็บ 1.1 กลางคืน 7-8 ชม. 1..2 กลางวัน 1-2 ชม.			
2.	การทำงาน ใน 2 สัปดาห์แรกหลังคลอดทำงานบ้านเบาๆ ได้ค่อยๆ ทำงานเพิ่มขึ้นทีละน้อยจนครบ 6 สัปดาห์ทำงานได้ปกติ			
3.	อาหาร มารดาต้องการอาหารที่มีคุณค่ามาก 3.1 รับประทานเนื้อสัตว์ ถั่ว ไข่ 3.2 แป้งหรือข้าว 3.3 ผัก ผลไม้ทุกชนิด 3.4 นมและน้ำ ดื่มน้ำ 8-10 แก้ว 3.5 งดอาหารรสจัด ของหมักดอง ชา กาแฟ และเครื่องดื่มที่มีส่วนผสมแอลกอฮอล์ เช่น ยาดอง เหล้าต่างๆ ยาขับเลือด			
4.	การรักษาความสะอาด 4.1 อาบน้ำวันละ 2 ครั้ง เช้า- เย็น 4.2 สระผม 2-3ครั้ง/สัปดาห์ 4.3 ตัดเล็บให้สั้น เสื้อผ้าสะอาด			

ลำดับ	รายการประเมิน	ปฏิบัติ	ไม่ปฏิบัติ	หมายเหตุ
5.	การรักษาความสะอาดเต้านมและหัวนม 5.1 ล้างให้สะอาดขณะอาบน้ำ เช็ดหัวนมเมื่อสกปรก ไม่มีคราบน้ำนม แห้งติดเพื่อป้องกันหัวนมแตก 5.2 สวมเสื้อยกทรงพยุงเต้านม			
6.	การรักษาความสะอาดอวัยวะสืบพันธุ์ภายนอก 6.1 ทำความสะอาดด้วยสบู่หรือด้วยน้ำสะอาด 6.2 หลังอุจจาระและปัสสาวะทุกครั้ง ซับให้แห้งจากด้านหน้าไปด้านหลัง 6.3 ใส่ผ้าอนามัยไว้เสมอและควรเปลี่ยนผ้าอนามัยทุก 4-6 ชั่วโมง			
7.	การร่วมเพศ 7.1 งดการร่วมเพศจนกว่าจะได้ตรวจหลังคลอดเมื่อครบ 6 สัปดาห์และ 7.2 ควรปรึกษาสามีเรื่องการคุมกำเนิดก่อนมาตรวจหลังคลอดที่รพ.			
8.	การรับประทานยา รับประทานต่อเนื่องจนครบ 8.1 ยาบำรุงเลือด(เม็ดสีแดง) รับประทานครั้งละ 1 เม็ด วันละ 3 เวลาหลังอาหาร 8.2 ยาแก้ปวด (ลักษณะเม็ดสีขาว) รับประทานครั้งละ2 เม็ดวันละ 3 เวลาหลังอาหาร หรือรับประทานเมื่อมีอาการปวดแผล ปวดมดลูก ห่างกันอย่างน้อย 4 ชั่วโมง			

ลำดับ	รายการประเมิน	ปฏิบัติ	ไม่ปฏิบัติ	หมายเหตุ
9.	การวางแผนครอบครัว ถ้าต้องการมีบุตรอีกรอบุตรคนนี้มีอายุอย่างน้อย 2 ปี ระยะนี้คุมกำเนิดแบบชั่วคราว ถ้ามีบุตรพอแล้วควรทำหมัน			
10.	ด้านจิตใจ ทำจิตใจให้สบาย ถ้าวิตกกังวลร่างกายทรุดโทรม น้ำนมน้อยไม่เพียงพอสำหรับเลี้ยงบุตร (ประเมินปริมาณน้ำนม น้ำหนักบุตรที่เพิ่ม)			
11.	การบริหารร่างกายหลังคลอด 11.1 คลอดปกติ เริ่มหลังคลอด 24 ชม. 11.2 ผ่าตัดคลอด เริ่มเมื่อแผลผ่าตัดติดดีหรือหลังผ่าตัด 1 เดือน ลักษณะกล้ามเนื้อหน้าท้องและอุ้งเชิงกรานกลับสู่สภาพปกติ			
12.	อาการผิดปกติที่ต้องมาโรงพยาบาล 12.1 มีไข้ ปวดศีรษะอย่างรุนแรง ตาพร่ามัว 12.2 น้ำคาวปลากลิ่นเหม็นสีแดงสด ออกจำนวนมาก 12.3 เต้านมหรือแผลฝีเย็บอักเสบ 12.4 น่องบวมแดง ปวด 12.5 ถ่ายปัสสาวะบ่อย แสบขัดเวลาปัสสาวะ			
13.	การเลี้ยงลูกด้วยนมแม่ ให้นมแม่อย่างเดียว 6 เดือนและไม่ให้อาหารเสริม ใดๆ			

ที่มา : คู่มือ " ข้อแนะนำมารดาหลังคลอด "

โดย เจ้าหน้าที่แผนกหลังคลอด โรงพยาบาลร้อยเอ็ด จังหวัดร้อยเอ็ด

APPENDICES B

Research Instruments

The Comparison of Self-care behavior between HIV-Infected Mothers and Non-infected Mothers.

Survey Part 1 Personal Information (Series……..)

1. Personal Information

Informant Name (alias)……..Age …… years.
Marital Status ……Race…….
Nationality……..…Religion……
Occupation ……..……...Education…….
Address: district……province……..…….
Date of giving birth……..Vaginal/C-section delivery..…….

2. Current History of illness/gravidity

The number of gravidity……..…The number of parity……...
The number of abortion……...The number of Living children…

3. Family History of Illness

…….
……..
…….
……..
…….
……..
…….
……..

4. What information have you learned from antenatal clinics during pregnancy?

……
……
…….
……..
…….
……..
…….
……..

Survey Part 2 (HIV-infected mothers)

1. During pregnancy

5) How do you take care of yourself?
……
……

6) Did you receive anti-retrovirus medicine?
0. □ No 1.□ Yes
When did you receive? …….....
Type of medicine:.....

7) How were you suggested by doctors or nurses?
.....
……

4) How were your symptoms after receiving the medicine?
……
……

2. After delivery

1) How did you take care of yourself?
……
……

2) Did you receive anti-virus medicine?
0. □ No 1.□ Yes
When did you receive? …….....
Type of medicine: …….....

3) How were you suggested, by doctors or nurses?
……
……

8) How were your symptoms after receiving the medicine?
……
……

2. Did you breastfeed your children?
0. □ No
What kind of milk did you feed your child? …….
Where did you receive the milk?.....
□ Yes, why did you breastfeed? ……...……

3. Do you have any health care problems? How? .....

4. What is your plan for your future life? ……..

Survey Part 3
Health Assessment 6 aspects: The conceptual framework of Orem's self-care theory (Orem, 1981)

Aspect 1 Adequate food, water and air intake

1.1 Do you have five complete food groups a day?
Do you have any abstained food? How?
(Five food groups: rice, meat, milk, eggs, vegetables and fruits)
……
……
……

1.2 Type of drinking water ……How many glasses a day?.....glasses/day
……

1.3 How is your house's atmosphere? ……
……

Aspect 2 Excretion

2.1 Urination……times/day Appearances …..……
Excretion ……times/day Appearances …….……

2.2 Do you have constipation problem?……

……

Aspect 3 Activity/ Rest

3.1 What are your daily activities……
……
3.2 Sleeping hours a day……hrs. Day time ……hrs. Night time …….hrs.
…….

3.3 Do you have sleeping problem?…….……
…….

3.4 Do you take any sleeping pills?…….
……

Aspect 4 Solitude/Social Interaction

4.1 How many people are there in your family?……..
…….
Family types: Single family or Extended family……..
……
4.2 How is your family relationship?…….
4.3 Who does help you looking after your children? ……
4.4 What are your community activities?……

Aspect 5 Prevention of Hazard

5.1 Breastfeeding

Did you breastfeed your child? How long? What supplements did you give your child? ……
……

5.2 Medications

What medicines did you receive after delivery?.....
……

How did you take them?.....
…….

Did you to check your blood after delivery? ……
……

5.3 Contraception

Did you have contraception after delivery? …….
……
How?.....
When? ……..
Did you have any complications?.....
……

5.4 Examination of cervical cancer

Did you have an examination of cervical cancer after delivery?
……
When?.....
Did have any disorders?.....
How?.....

Aspect 6 Promotion of Normality

6.1 Are you satisfied your current life?.....
……
How? ……..……..

6.2 Postpartum inspection appointment

How many inspection appointments have you had after delivery?
……
Where did you have?.....
When did it have?.....…….
What is the result of the inspection?.....…….…….
When is the next appointment?……..……

Source : " Nursing process theory and applications" By Sujitra Leung-amorn led and her group,Faculty of Nursing, Khon Kaen university.

Survey Part 4 Behavior Assessment of Postpartum Mothers

No.	Assessment Lists	Yes	No	Remarks
1.	Rest: postpartum mothers should take enough rest especially 2 weeks after delivery. Do not work hard within 6 weeks after delivery examples; carrying heavy things or walking up and down stairs which is affected to pelvic viscera and perineal wound. 1.1 Night time 7-8 hrs. 1..2 Day time 1-2 hrs.			
2.	Working: postpartum mothers can do some light house works within 2 weeks after delivery and can do more gradually till 6 weeks.			
3.	Diet: Mothers need healthy foods 3.1 Meat, bean, eggs. 3.2 Flour or rice. 3.3 All kind of fruits and vegetables**.** 3.4 Milk and drinking water 8-10 glasses**.** 3.5 Avoid spicy food, fermented food, tea, coffee and alcohol**.**			
4.	Cleanliness 4.1 Taking a bath 2 times/day: Morning - Evening. 4.2 Hair washing 2-3 times/week. 4.3 Short nail cut and clean clothes wearing.			

No.	Assessment Lists	Yes	No	Remarks
5.	Breast and nipple cleanse 5.1 Clean during taking a bath, wipe when nipples are dirty without having milk crust. 5.2 Wearing support bras.			
6.	External genitals cleaning 6.1 Clean with soap or clean water 6.2 Wipe backward direction after urination excretion 6.3 Wear a napkin always and change every 4-6 hrs.			
7.	Sexual intercourse 7.1 Abstain sexual intercourse till having a postpartum inspection 6 weeks after delivery. 7.2 Consult with your husband about contraception before having the postpartum inspection.			
8.	Medications: Taking medicines completely 8.1 Ferrous fumarate 1 tablet time 3 times/day after meal 8.2 Paracetamal (500mg.) 2 tablets/time 3 times/day after meal or when ever having wound, and uterine pain every 4 hrs.			

No.	Assessment Lists	Yes	No	Remarks
9.	Family planning: At least 2 years for spacing of children. Having temporary contraception and having sterilization after having enough.			
10.	Psychological health : Avoid stress which will effect to your health and cause insufficient breast milk for your child. (assessed from amount of milk and child's increased weight)			
11.	Exercise 11.1 Vaginal delivery started after 24 hrs. 11.2 C-section started after complete welding wound or 1 month after the previous operation (abdominal muscles and pelvic floor back to normal)			
12.	Disorder symptoms to come to hospital 12.1 Have a fever, a severe headache and blurred vision 12.2 Have smelly and many red amniotic fluid 12.3 Have inflammations of breast and perineal wound 12.4 Have calf pain and swelling 12.5 Have frequent urination and feeling sore during urination			
13.	Breastfeeding: 6 months breastfeeding at least without feeding any supplements.			

Source "The advices of Postpartum Mother" Handbook by postpartum section's officers, Roi Et Hospital, Roi Et Province.

BIOGRAPHY

Name : Mrs. Nonglak Khamsawarde
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Education Background
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1. Equi valent to Bachelor of Science in Nursing ,1988
   Nakornrajsima Nursing College.
2. Public Health Administration, 1995
   Sukhothai Thammathirat Open University.
3. Law, 2006
   Ramkhamhaeng University.

Master degree : Master of Social Work ,1998
Thammasat University.

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Suwannaphum hotspital Roi-Et Province. ,1988-2006
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