

CHAPTER II

ESSAY

Promoting Positive Life-styles And Emotional Health Of Pregnant Women With HIV Through Group Process Health Education

2.1 INTRODUCTION

Pregnancy is a period of potential risk. Any woman can have complications during pregnancy. Although pregnancy is not a disease but a normal physiological process, it is associated with certain health and survival risks for women and their infants. Among infectious disease complications, HIV infection is one of the most complex since it has various short and long term impacts not only on the mother and child's health but also on the family, social and health systems. In Thailand, the number of HIV pregnant women has increased from less than 1 % of total 1991 pregnancy to more than 2 % in 1996. In some northern provinces the incidence rate was up to 9 % percent of all pregnant women who visited antenatal Clinics (Shaffer, 1996).

The problems of HIV infection among pregnant women have wide impact than HIV infections in other population groups because it has combined two major problems

of mother and child . The first is a fetal and incurable nature of AIDS. And the second is the direct short or long-term impacts on the newborn due to the chance of HIV transmission from mother to child and the negative effect on the mother's role in relation their children and families. In addition, it is known that HIV effect not only to individual infected family but also the socio-economic and health care system. The issue is how to reduce these impacts. In general, preventive strategies can be classified into three levels the primary, secondary and tertiary prevention:

1. **The primary prevention:** to prevent HIV infection among women in reproductive age groups, to prevent those who already infected from becoming pregnant and to terminate the pregnancy among infected women.
2. **The secondary prevention:** to maintain health status of pregnant women with HIV in asymptomatic stage, to prevent infectious complications and to reduce the negative impacts from their pregnancy.
3. **The tertiary prevention:** to provide curative and rehabilitation services for those who are in symptomatic or advance illness stage. Source: Bishop, 1994

Strategies at the primary level not easily dealt with, as they involve legal rights, reproductive rights and the maternal social value of women. In addition, social fear and stigmatization of HIV/AIDS also affects infected people. Men, in particular, will not admit their infectious status even to their spouses. As a consequence, most women have been infected by their husbands and learned their HIV status during their first ANC (Shaffer, 1996) .

In this situation, when primary prevention may not be achievable, the secondary and tertiary prevention are needed. However, the tertiary prevention, to assist those who are in symptomatic or advance stages, are the endpoint problems and require a lot of resources with high health care cost. This study, therefore will focus on secondary prevention, to maintain health status of pregnant women with HIV which could associated to the prolong of disease progression. There is a greater need to focus on this group as the number of people living with HIV in asymptomatic is much more than those who are already in the illness stage.

Although HIV/AIDS is known as a fatal and incurable disease, being HIV positive does not represent the terminal stage of the life. Even if there is no medication to stop the attack of HIV virus, it will take a number of years for the disease to progress to the last stage. By nature of the disease, the time period between being positive to being symptomatic normally takes a number of years which varies from an average of 10 years in United States to about 5-6 years in Thailand. The longest onset of disease progression was reported as being 17 years from the first infection (Rukrongtham, 1998 & Stine, 1996). It, therefore, is valuable to maintain the health status of people living with HIV/AIDS (PWAs) in asymptomatic stage, as it will reduce a number of impacts to themselves and others.

In maintaining health status of PWAs, it has been proved and recommended by many clinical studies that using antiretroviral therapy inhibits the reproduction of HIV or reduces the body's viral load. The most up-date effective regimen is triple therapy (the using of 3 protease inhibitors at the same time). But there are still questions about the benefits of or the need for using this therapy among asymptomatic cases, as medication

cost is a major constraint for HIV individuals to be treated properly. The triple therapy costs about Baht 14,000- 20,000 per case, per month (Rukroongtham, 1998). This do not includes cost of medication for other HIV/AIDS's complications. The government and majority of PWAs can not afford this cost, particularly during the countries' economic crisis. An interesting issue is the cost-effectiveness in using this approach. Some people will have to spend their own and family savings for medication. There should be other alternatives to raise the hope of these people, aside from only relying on modern medication. In dealing with this issue, there are other proposed alternatives such as using traditional medicine, meditation or nutritional therapy, etc.

The fundamental concept of this study, therefore, is to find other alternatives as co-factors in maintaining the health status of PWAs rather than rely only on modern medication therapy. Maintaining health status in this context does not mean only the ability to inhibit the body's viral load, but could refer to the condition that pregnant women with HIV can live normally with fewer preventable complications from HIV/AIDS and pregnancy. Meanwhile, it includes the wellbeing feeling or the adaptation ability to cope with potential complications and various psychosocial effects.

In fact, it is the need to promote healthy status of women living with HIV not only during pregnancy but also after delivery and for the whole of their lives. However, during pregnancy, women are more concerned about their health than other period of life. It is more advantageous and essential that by the time of delivery, pregnant women with HIV have received the best possible preparation to physically and mentally cope with HIV/AIDS.

In promoting the behavioral health of these women, one most essential factor, which cannot be ignored, is psychological health. As mentioned earlier, most of these women first learned of their HIV status at an ANC clinic. During this period, most experience emotional problems such as denial, anger, depression, helplessness (Stine, 1996; Kompayak, 1998). Integration activities to reduce emotional problems are therefore needed. This study therefore will deal with the physical and emotional health of pregnant women with HIV.

To access the majority of pregnant women with HIV, hospitals or health centers are the most feasible places, as it was reported that in Thailand, more than 80 percent of pregnant women use ANC services (WHO, 1997). Therefore, the intervention should be "hospital based" by using ANC as an entry point. The major purpose of this study is to define effective health education method as an alternative tool in promoting a positive life style. The assumption is that in behavioral change, individual needs to have knowledge, attitudes, motivation and self-efficacy. To develop self-efficacy, aside from cognitive and skills readiness, we need to deal with emotional adaptation to cope with HIV/AIDS and pregnancy. After emotional distress evolves into an adaptation period, these women will likely have positive life-styles. The ultimate outcomes of this intervention will therefore worthwhile not only for the survival of individual pregnant women but for increased care giving ability to their new born children and their families and for reducing the burden of HIV/AIDS in society and the health care system.

2.2 PREGNANT WOMAN WITH HIV

2.2.1 Situation of incidence

The heterosexual HIV epidemic has increased rapidly in Thailand and is now an important problem among pregnant women in the Ante-Natal Clinics (ANC). The following table shows reports from Ministry of Public Health sentinel serosurveillance of pregnant women who visited ANC. This surveillance consists of random surveys conducted twice a year in selected provinces and selected target groups;

Table 2.1 Sentinel Serosurveillance of Pregnant Women Who Visited ANC clinics

June	1990	1991	1992	1993	1994	1995	1996	1997
Percent	0	0.8	1	1.4	1.8	2.3	1.8	1.7

Source : Division of Epidemiology, MOPH (December 18, 1997)

Although, as shown above, the overall 1996 and 1997 incidence rate were slightly decreased, but in 1996, it was found that in Northern provinces, the incidence rate was up to 6 -9.9 % (Tuntavorn, 1996). Each year an average of one million women become pregnant. It is estimated that the average number of pregnant women with HIV is 2 % of the total or about 20,000 per year. However, in 1996 the number of pregnant women who visited government ANC hospital was higher than estimated by up to 39, 161 cases. There are a number of reasons for the increasing number of pregnant women with HIV during these few years:

1. The cumulative number of HIV infected in reproductive groups is high. It is estimated that 750,000-850,000 people are living with HIV/AIDS of whom 85 percent are in the reproductive age groups and 40 percent are women. To encourage these women not to become pregnant is not easy as it is related with social values and ethical issue of reproductive rights.
2. A pattern of late ANC visits results difficulty in terminating pregnancies. A study among 264 pregnant women who attended ANC clinics in 8 provincial hospitals in Thailand found that half of them wanted to terminate their pregnancy, but two-thirds learned their infectious status later than the 3rd month of pregnancy. This makes termination difficult and not safe (Krisurapong, 1998).
3. The recently successful short course of anti-viral prophylaxis to reduce vertical transmission rate from 25 percent to 9.2 percent (Rukroogtham, 1998). This finding has raised the hope that pregnant women with HIV can continue their pregnancy. In addition, many hospitals, mostly in Bangkok, are having the own clinical studies to test the effectiveness of new regimens. However, the interesting issue is that who will take care these babies in future if their mother and their father have loss the care ability from HIV/AIDS illness.

Due to the above mentioned reasons, in reducing number of pregnant women with HIV, it seems to have many complex issues related with. However, it is the needs to find the strategies both in short and long term to prevent or reduce the impacts from this problems.

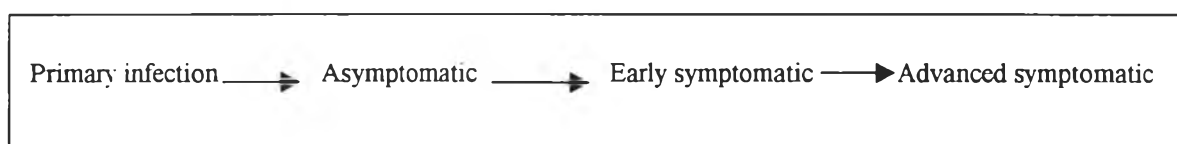
2.2.2 Impacts of pregnant women with HIV

2.2.2.1 Impact on the pregnant individual

a. Physical Impacts

Basically, every pregnancy faces risk; data suggest that around 40 % of all pregnant women have some complications (WHO, 1998). Aside from a potential risk of pregnancy complication, pregnant women with HIV will have a potential risk of HIV/AIDS effect especially if they have already reached the illness stage. It was found that most pregnant women in Thailand are in the asymptomatic or early symptomatic (Shaffer, 1996). The classification of HIV/AIDS progression mostly is based on signs and symptoms associated with immune dysfunction, which can use CD4 cell count as a clinical indicator. There are four stages of HIV infection;

Figure 2.1: Staging of HIV infection



Sources : Kriet Rukroongtham (1998) & Stine (1996)

Clinical manifestations of primary HIV infection include fever, fatigue, rash, headache, pharyngitis, lymphadenopathy, etc. Among pregnant women with HIV, there may be some common symptoms like failure to gain weight or some specific gynecological problems such as genital herpes, vaginal candidiasis etc (Clezy & Giles, 1994). The effects of pregnancy on HIV infection and HIV infection to pregnancy are

controversial. Pregnancy and HIV both have been shown to progressive immunocompromising effects. However, it was reported that “pregnancy” could further depress the immune system of HIV infection cases. Pregnant women with HIV will have lower resistance to infection and probably develop AIDS in a shorter time (Mincoff, 1996 in Panuwatsuk, 1997 & Williams, 1994). Hence, as the illness progress, it was reported that there is an increased likelihood of poorer perinatal outcomes such as premature delivery and low birth weight. It was found that the risk of miscarriage in HIV positive women was doubles that of negative women in a large Malawi study. In addition, the risk of stillbirth was higher for HIV-positive women in Kenya (Gold et.,al. 1994 and Berer, 1993).

a. Psychological Impact:

People living with HIV are confronted by a number of problems and often need emotional support especially when they first learn the seropositivity. Majority of pregnant women with HIV first learned their HIV status at ANC clinics (Krisurapong, 1998 & Shaffer, 1996). A study among 60 pregnant women with HIV who attended ANC clinic at Vajira Hospital found that psychological problems of these women were **HIV transmission to fetus, social discrimination, confidentiality and family life, illness and therapy respectively** (Asdondecha and Danpradit, 1997). In relation to this study, a cross-sectional study among 264 pregnant women with HIV, who attend ANC clinics of 8 provincial hospitals in the Northern and Central provinces, found that 38 percent were in emotional crisis stage (Krisurapong, 1998). In addition, a recent qualitative and case study follow-up among 20 pregnant women with HIV who attended a private hospital in Bangkok found that the psychological and emotional reactions are the first obviously impact. Major causes of the emotional distress are the

fears and discrimination from families and societies (Panuwatsuk, 1998).

These findings could indicate the severity of psychological problems of these pregnant women. Basically after learning the blood test results, individuals may have different reactions but most will experience shock, denial, anger, confusion, anxiety and feelings of helplessness. We can say that this time is **the emotional crisis stage**. After having passed through the crisis stage, most people living with HIV experience an adjustment period which is the stage where people try to **adjust their emotional status** by finding reasons to relieve their distress. It can be assumed that most pregnant women with HIV probably are in between these stages. The third stage is **the coping and managing behaviors and life-styles** phase. People will try to change their behavior, seeking information and health care choices. The last psychological stage is **the acceptance stage**, where some people start experiencing illness so that the truth cannot be denied. (Boonmongkol, Pradapmuk & Reangsorn, 1998 and Taylor, 1995).

The above mentioned consequence of psychological evolution is a rationale for this study which proposes to integrate the resolution of emotional crisis and adjustment stages so these people can cope with HIV and manage their lives.

2.2.2.2 Impact on others

a. Impact on child and family

In Thailand, it is estimated that the transmission rate from mother to child is 24.2 percent in non-breast feeding cases (Kunanuson, 1998). It was found that

transmission rates are also associated with disease progression. In some areas the transmission rates were up to 45 percent (Chaitongwattana & Limponsanurak., 1998). In addition, if pregnant women are in the symptomatic stage, the chance are greater of having poor perinatal outcomes that affect the child's health.

Aside from direct biological impact on the child, if the mother is sick, her care giving ability will likely to be less. Hence, if the disease progresses and the mother dies, there will be a greater impact on the child's survival and development, no matter whether the child is infected with HIV or not. In addition, many households are headed by women or depend heavily on women's roles.

b. Impact on the health system

The impact of HIV/AIDS on the health care system is the increase in health care demand and cost, particularly as the stages of illness progress. It is projected that the bed occupancy rate of HIV/AIDS patients will be increase from 1 percent in 1994 to 12 percent of total beds in country by the year 2000 (Poolcharoen, 1998). Another obvious impact is the increasing cost of medication. It was reported that the cost of basic antiviral therapy (mono-therapy) alone costs more than 125 percent of total annual budget of the Epidemiology Department, MOPH (Rukrongtham, 1998).

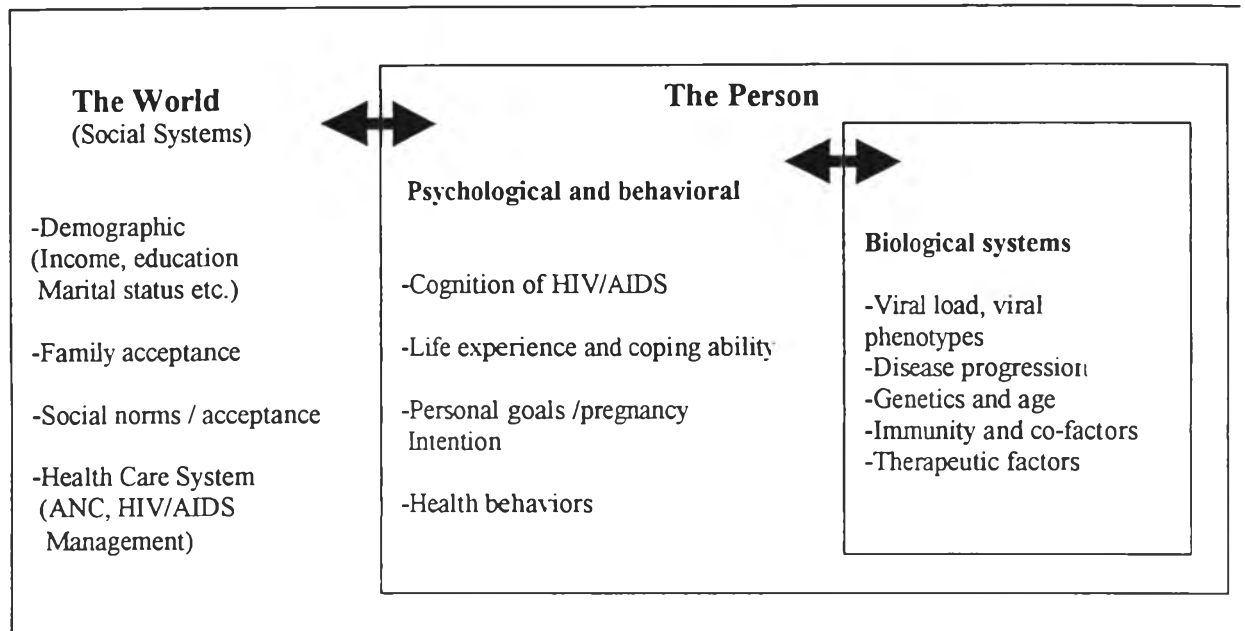
The above-mentioned impact on both pregnant women and others clearly indicate a great need for intervention that responds to both the physical and psycho-emotional needs of pregnant women with HIV.

2.2.3 Factors affecting health status of pregnant women with HIV

In general, various factors influence disease progression. In HIV/AIDS cases, these include both uncontrollable like genetic and biological factors and controllable like therapeutic and lifestyle factors. Moreover, there are also additional factors such as environmental and psychosocial issues (Naidoo & Wills, 1994). Therefore, in maintaining the health status of these women, we need to concern both physical and psychological health. The “Bio-psycho-social Model” is attempt to explain the relation between physical and psychological health. (Engel, 1980 in Bishop, 1994 & Sarafino, 1998.)

According to this model, there are two major factors affecting people’s health status; personal and environmental factors. In each factor, there are also a number of co-factors, i.e., in the personal factors are both physical and psychological issue. Meanwhile, social factors also consist of health care system, social norms, family beliefs and the general social system in which people live. The following figure shows co-factors and their inter-play;

Figure 2.2 : Determinant Factors to HIV/AIDS disease progression : the interplay of systems in the Bio-psychosocial model



Sources: Modified from Bio-psychosocial Model : Engel, 1980 in Bishop, 1994,

Sarafino, 1998 & the HIV/AIDS Biological factors from Rukroontham, 1998.

The concept of this model is that the biological, psychological of individual person and social system are interrelated. We can say that a person's health status is a product of many different influence factors ranging from the cellular and biochemical to the social and cultural. Changes in person's health status have wide ranging effects at the psychological, social and cultural levels. Theoretically, in promoting health status of people, these various influence factors should be considered as much as possible. Therefore, in response to this concept, the term "holistic approach" has been applied to many HIV/AIDS interventions. However, in practice, it might be too complex to work with all of these factors. Hence, the role of each factor is dynamic and has a different influence level. This study therefore, attempts to identify some selected influence

factors, which could affect the health status of pregnant women with HIV. Based on the assumption that ANC is the first entry point and the most feasible area to access these women. The following are some major hospital based strategies to promote health status of pregnant women, which deal with biological and psychological and social system

2.2.4 Hospital based strategies in promoting health of pregnant women with HIV

Clinical management: as pregnant women, ANC is the most essential area in promoting health of pregnant women. As HIV asymptomatic people, clinical management is not as complicated as those who developed illness. In non pregnancy cases the follow-up is recommended every 3-6 months. Major purposes are to early detect and treat HIV-associated conditions, to implement primary opportunistic infection prophylaxis. Among pregnant women with HIV the administer antiretroviral therapy is not recommended due to its possible side effects to child health (MOPH, 1996).

Promote psychological health: strategies to promote psychological health of pregnant women with HIV is needed. **Pre-post test counseling** is the basic intervention to reduce psychological impacts of being HIV positive. **The counseling services** therefore should be continued during the whole process of pregnancy and even after delivery.

Information and health education: as hospital is the first entry point that the women learn their HIV status, one basic strategy promote health of these women is providing information and education services on both pregnancy and HIV AIDS.

2.2.5 Health status of pregnant women with HIV and behavioral factors

Based on the above discussion strategies, promoting health status of pregnant women with HIV in hospital context can be done in many different approaches. This study therefore will focus on promoting positive health behaviors due to the following reasons;

Limitation in using the antiretroviral therapy during pregnancy and even after pregnancy. Unlike people living with HIV in other group, it is not recommend for treatment pregnant mother with HIV due to its side effects to child health. In addition, as mentioned earlier that pregnant women wit HIV **will have lower resistance than other HIV or pregnancy group**. These women therefore, need to concern more on their behaviors, which could effects to their pregnancy outcome and their health status. Hence, even after delivery, the medication cost might be a major constraint in receiving proper therapy.

In addition, as HIV is a **chronic disease**, people living with HIV will have to cope with various complications. Aside from caring by health professional, these people need to adapt to the illness whether they worsen, stay the same, or improve over time.

Promoting behaviors is a **traditional approach, which can be self-controlled** by individual pregnant.

2.2.6 Related studies on behavioral factors and HIV/AIDS progression

It was recommended that “ an important approach to the asymptomatic patient is to encourage their active participation in improving lifestyle factors ...” (Gold, Donovan & Penny, 1994). The influence of behavior factor on the health status of people living with HIV has been proved from a number of studies. A longitudinal study among both men and women living with HIV in Switzerland found that stopping drug addiction improved the health of these people. Regular exercise among people living with HIV is also recommend to prevent muscle and joint diseases. The onset of disease progression is associated with nutritional factors. (Pradapmok, 1998, Stine, 1996, Ray and Berer, 1994 & WHO, 1995). In conclusion, changing life style i.e. having good hygiene, reducing or stopping smoking and alcohol intake, paying attention to good nutrition, reducing stress avoiding toxic substance and infection could effect to slow progress of the disease.

In general, health behaviors of PWAs include pregnant women with HIV can be classified into 3 categories based on purpose of the behaviors: preventive behaviors includes behaviors which aims to prevent the infectious and some other preventable diseases. Curative behaviors refer to health care seeking behaviors include self-observation of some warning or danger signs of both pregnancy and HIV. Rehabilitative behaviors_ includes nutrition concern, physical exercises, rest and

recreation behaviors. (See guideline to develop education content and discussion topics in Appendix 1)

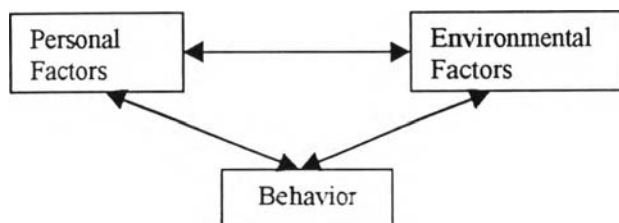
2.3 DETERMINING FACTORS IN CHANGING HEALTH BEHAVIOR

Behavior factors have been recognized as prominent contributors to human health prospects.” . Behavior is of importance to health either directly through learned lifestyles or directly in the environmental and socioeconomic context” (WHO, 1995). Health behaviors can be defined as “ those personal attributes such as beliefs, expectations, motives, value perception, and other cognitive elements: personality characteristics include affective and emotional stage traits; and overt behavioral patterns, actions and habits that relate to health maintenance, to health restoration, and health improvement (Gochman, 1982 in Glanz et.al., 1997).

2.3.1 The Social Cognitive theory

There are a number of theories that attempt to explain the factors that influence to behavioral change, The Social Cognitive Theory : SCT (Bandura, 1977;1986) is the one. The SCT is similar to the Bio-psychosocial concept which explains the relation of personal and environmental factor. But the Social Cognitive Theory (SCT) focuses more on factors that effect behavior change. The SCT describes human behaviors as being reciprocally determined by internal factors and the environment in which a person lives. Individual behavioral change can be facilitated by modifying personal factors and by altering environmental factors.

Figure 2.3: The Social Cognitive Theory (Bandura,1977)



Source: Maibach & Parrott, 1995

In the SCT, to perform some particular behaviors, aside from knowledge, skills and motivation, individual people need to have self-efficacy and outcome expectation on those behaviors. **Self-efficacy** refers to the belief of people in their capability to perform behaviors. From self efficacy people will develop **outcome expectations** which are the belief about the outcomes that will result from behaviors. The self-efficacy and outcome expectations create personal goals which are a motivational sources for behavioral change and maintenance. (Maibeach & Parrotte, 1995 and McKenzie & Smeltzer, 1997).

The concept of SCT is appropriate to explain the health behaviors of people living with HIV. As it is known that, social or environmental factors play major roles in determining health behavior or life-style of people living with HIV. Individual adaptation and coping ability to deal with HIV/AIDS is mostly influenced by family and social acceptance (Boonmongkol, 1998).

2.3.2 Application of Social Cognitive Theory into Practice

Based on the SCT, individual **knowledge, skills and self-efficacy** are essential fundamental inputs to the behavioral change.

Knowledge and skills

Knowledge and skills are fundamental inputs of behavioral change. *“if individuals are to perform specific behaviors, they must know first what the behaviors are and then how to perform them (Dignan and Carr, 1992)“*. “Without knowledge, people are unlikely to engage in the process that can ultimately lead to behavior change. Among people living with HIV such as pregnant women with HIV, only knowledge or information alone is insufficient for their adaptation ability to the diseases. These people also need to have some skills necessary to perform the behaviors. Some behaviors may be new to them such as practicing safe sex, physical exercises or using meditation to control emotional distress etc. In developing these skills, “communication process or education approach is a fundamental sources to increase knowledge and develop skills for behavioral change. ” (Maibeach & Parrott, 1995).

Self-efficacy

“Self-efficacy is a useful concept for understanding and predicting behavior”
Like knowledge and skills, self-efficacy to engage to various health behaviors is open to influence through the communication process. Perception of self-efficacy can be altered by four major models of influences: performance mastery experiences, vicarious

experiences , verbal persuasion regarding one's capabilities and inferences from physiological and affective states ((Bandura 1986, 1977 in McKenzie & Smeltzer, 1997 and Maibeach & Parrotte, 1995).

Based on these ground theories, the practical approach to strengthen self-efficacy of pregnant women with HIV can be done through should focus on the issue of direct experiential learning, observational learning to observe other who have success, persuasive communication to encouragement and reducing emotional problems such as fear and anxiety.

2.4 HEALTH EDUCATION: Intervention To Promote Behavioral Change

2.4.1 Need and feasibility of hospital education

“Education is currently the only weapon available to stem the spread of the epidemic and to foster support to those already affected (to HIV/AIDS)” (Huber, 1996). In general, the information about HIV/AIDS prevention is complex due to its content, which not only relates to medical information but also to many other socio-cultural and economic aspects i.e. social values, norm, poverty etc.. The education about HIV/AIDS which targets those who are already infected is much more complicated due to dynamics of the disease and its strong influence as chronic and fatal.. There are great needs in providing health education for pregnant women with HIV due to the following characteristics:

-as pregnancy: health education is of the major components for ante natal care. Health education effects better health practices and the ability to notice and avoid complications during pregnancy in order to have good perinatal outcomes and a healthy mother and child.

- as people living with HIV : People living with HIV, especially at the beginning or at the asymptomatic stage, need to have education in order to improve their lifestyle factors. Life style factors can improve their well being. *“Seeking information about health problem and treatment procedures” is one of the coping strategies for chronic diseases including HIV/AIDS* (Sarafino,1998, Boonmongkol,1998). In addition, the asymptomatic stage is the most feasible period to learn and practice. After the disease progress, the readiness to learn or to practice would be less due to decreasing physical ability. **Hence,** both pregnancy and HIV infection are dynamic. Changing physical conditions and potential for complications can occur from time to time which makes education for these target pregnant women essential.

Although there are many other HIV/AIDS information sources, *hospital education however is the most feasible* among this target group due to the following two major reasons: The first is ***the access to target group*** : pregnant women are scheduled to visit ANC regularly and much more frequently compared to other HIV infection groups. This vulnerable period, is the most feasible time to transfer knowledge and skill in caring for themselves. And second is ***the readiness of hospital resources***: this includes health professional, peer group and places etc..

2.4.2 Current situation of hospital health education

Pattern of hospital education in each hospital is different, based on objectives of education as well as the available resources. Basically, there are two type of health education: individual and group approach:

- a) The Individual approach includes individual education and counseling. Major characteristics are personalized : concerned with individual difference such as cognitive knowledge, interest, physical conditions, emotional and social characteristics (Dignan & Carr, 1992). This type of education often involves extensive individual interviewing and counseling such as pre-post test counseling and individual instruction during pregnancy check-up. Communication is usually be the un-structured and there is no plan or standard of content.

Theoretically, the advantage of individual education is two-way communication, the correspondence can occur at all times and is able to incorporate individual needs and interests. However, in the real practice, as the intervention depends on the relationship between health professional and clients, there is normal y an inequality and superior role between the professional and clients. This can limit or inhibit communication feedback and is subjected to time constraints. (Dignan and Carr, 1992, Nathee, 1998)

- b) Group approach is education that targets more than one person. There are many forms of group education such as lecture, demonstration, group discussion, peer group discussion etc.. Group size can vary from 2 persons to large group presentation up to 100 persons depending on the program design. This approach requires more logistical preparation than the individual approach.

There are several benefits of group education. One most obvious benefits is fewer resources are consumed compared to individual education i.e. man-power, equipment etc.. Interpersonal learning in group a atmosphere is an advantage that makes a difference in learning out-puts. Group education have a more standardized content and is able to access or evaluate outputs of activities more readily than the individual approach.

Aside from the two health education approaches, hospital health education media is also a tool for information transferring. These media include **standard video/slide presentations, advertising posters, distribution printing media**. Each type of education, whether individual, group education, audio-visual presentation or printing media distribution, has its strengths and weaknesses depending on the appropriateness of activities to objectives, need of clients, content, readiness of staff, availability of resources and context of education.

In general, regarding to health education media for people living with HIV, one major constraint is the appropriateness of each media's content. The content is mostly too generalized for each target group which may have specific problems such as

pregnant women with HIV, (Thai NGO Collation on AIDS: TNCA, 1997). In addition, the health educators mostly provide media to clients based on the availability of the media rather than the needs of clients. Preventive campaign media have been used among those who are already infected.

2.4.3 Specific Characteristic Of Health Education Program For Pregnant Women With HIV

Basically, in designing health education programs, there are a number of factors to be considered. These includes objective of health education, content, needs of the clients, knowledge and skill of educators, the availability of health education media, time and place and the context in which the health education will occur (Nathee, 1998). Following are some specific characteristics to be used in designing health education programs for target pregnant women:

1. **Objective of health education** : the overall objective of health education for pregnant women with HIV can be classified into 3 categories:
 - A. Health education that aims to provide **information** about HIV/AIDS disease progression, regimens or related issues about HIV/AIDS.
 - B. **Health education that aims for behavioral change**. Defining specific health behavior will also effects to the design of education method such as:
 - Behavior changing that require **single skills** such as condom using, meditation, milk powder preparation etc..
 - Changing in **life-style** such as eating, exercises, hygiene care, emotional controlling etc

C. Health education that aims for self-care practices which is the ultimate goal of almost all health education programs.

2. Contents: content that can change behavior and self-care ability should not be restricted to providing information. There is a need to develop specific content which can be a tool to impart both knowledge and skills as well as encourage purposes. As mentioned earlier, HIV/AIDS information is a complex, dynamic issue. Content should be well developed into a simple and understandable form.

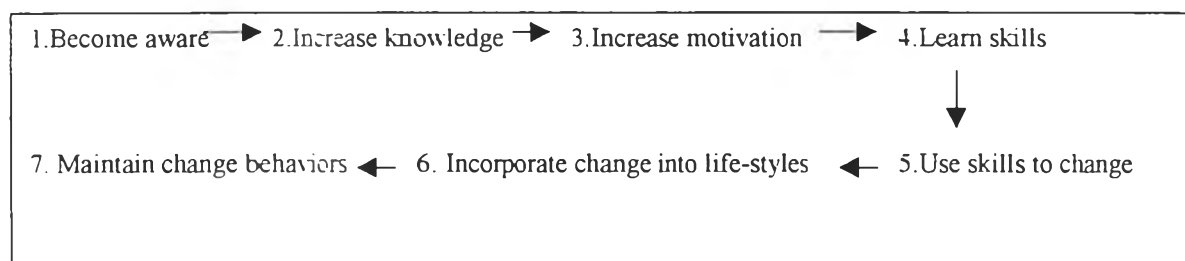
3. Characteristics of pregnant women with HIV : There are two major specific characteristics that should be considered: the first is the physical change due to pregnancy complications from HIV and pregnancy. Physical condition may limit some education activities i.e. the clients may not be able to sit or stand-up for a long time etc.. The second is a psycho-emotional problem requiring appropriate approaches.

2.4.4 Problem of hospital education

Changing behaviors or life style is one of the most complex issues in health promotion programs. Basically, changing lifestyles is related with two major factors ; personal and environmental factors. Unlike community or out- reach education programs, the role of hospital based health education is limited in accessing environmental factors such as physical environment, family etc. By the nature of the program, hospital education therefore mostly focuses on personal factors. However,

even within personal factors there are a number of related factors that have been ignored in many hospital education programs. Although it has been accepted that increasing knowledge, attitude and practices are insufficient for changing behavior (Sundeen, 1994), most hospital programs provide only information.. For education that aims at behavioral change there are some related factors that should be included such as motivation, decision making, values, perception etc as shown on the following figure illustrates the stages of behavioral change:

Figure 2.4: Behavioral-Change Frameworks

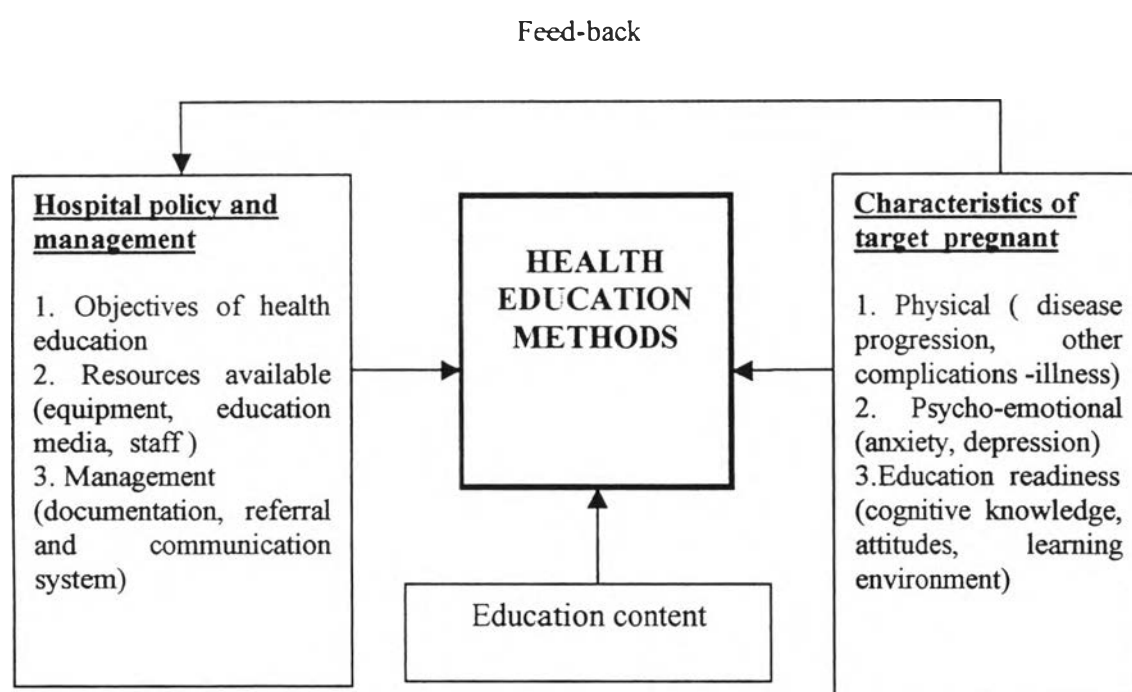


Source : Dignan and Carr, 1992

The major problems of health education that clearly addressed based on the above figure is that the current health education program mostly is concerned only at the first two change stages. Although hospitals have limitation in assessing the behavioral change in the advance stages, but there is still a potential for hospital education to take further steps through incorporation of components dealing with the *increase motivation and learn skills* as illustrated in figure 2.5. These education outputs will directly benefit and increase a the potential for target pregnant to move further steps to the ultimate goal of maintain change behaviors.

Based on communication principle there are a number of factors effects to communication outcomes i.e. educators as sender, target pregnant as receivers, message or *content* and *channels* or health education methods to be used. The following figure describes factors related to hospital health education:

Figure 2.5 : Analysis Of Factors Affecting Hospital Education



Source: Modified from Ross's Communication Model (Sundeen, 1994).

Based on the above mentioned figures, health education problems can result from the hospital, client, content and method used. The problems of clients have been already discussed. This discussion therefore, will focus more on health education problems with the hospital as a focal point. These problems includes;

1. The failure to identify needs of clients: Most hospitals are not concerned in assessing target clients. A study in 5 large ANC clinics in Bangkok, where number of attendances do not less than 200 cases, found that these hospitals demonstrated low level in target assessment (Suttasiri, 1990).
2. The failure to individualize content: this problem is related to the lack of target assessment resulting in too generalized of the content. The same study as mentioned in number 1, found that, three out of five hospitals didn't concern on individual differences of target i.e. gravida, gestation period and complication etc. All will be mixed-up in the same class and using the same content on "perinatal health practices" (Suttasiri, 1990). One notable related problem is caused by the limitation of resources needed to develop health education media.
3. The lack of coordinated efforts among various professional groups: This problem is mostly due to hospital policy and management. Since major roles of hospitals have been focused on curative services, most hospitals therefore do not give priority to health promotion programs. It was found that hospital policy, staff management, budget and other resource allocation have directly effect to both quality and quantity of health education (Whitman, 1986 in Chuangchan, 1990). In addition, another common constraint is the lack of standard protocol for health education resulting in duplication of roles among hospital units.. Target clients may learn the same information from many other units in the hospital.

Regarding the above problems, it was found that hospitals mostly provide health education in “an incidental rather than in a carefully evaluated manner” This can refer to education which does not standard curriculum or content and does not have schedule or allocate time. The most traditional methods of casual education include individual instruction, standard video-slide presentations and print media distribution . A major weakness of this educational approach is the continuation and standardization of content. In addition, this approach has limits in evaluating education outputs.

Based on figure 2.3 and 2.4 on the SCT and behavioral change, we can conclude that casual education in hospital cannot deal with the learn skills and psychological factors which are the essential factors result in behavioral change. If the hospital have the objectives that aims for behavioral change purposed, the hospitals should identify other potential factors that could deal more in increasing knowledge, skills, motivation and self efficacy to perform the prescribe behaviors. The approach could also respond to the readiness of the target pregnant and appropriate to hospital's available resources.

2.5 PROPOSE INTERVENTION: Small group discussion using group process approach

2.5.1 Rationale of using group approach among pregnant women with HIV

In general, health promoters work with many different kinds of groups in a

variety of settings. Groups are formed for a variety of purposes. The main groups in the context of health promotion are formed for one or more of the following purposes:

1. For education-to provide information and to imparts necessary skills for health practices.
2. For raising awareness about health behaviors and HIV/AIDS through group discussion
3. For mutual support to help each other to cope with shared problems/disabilities i.e. the forming of self-help groups of people living with HIV.
4. For social action-to use the collective power of the group to campaign for social change, to raise fund.
5. For group counseling-to help member to find solution through exploring a shared problem with a counselor i.e. pre-post test counseling.

Sources: Ewiles & Simnett, 1996 and Weiss & Lonquist, 1997

Among pregnant women with HIV , the group approach could respond to almost all of the mentioned purposes including:

- to identify and explore the needs of individual members and the group.
- to facilitate the group making healthier choices in some complex health practices.

There are many findings about the advantage of using the group approach among people living with HIV. In Thailand, it is estimated that there are more than 100 self-help groups and net-working among these groups. In the upper-northern region where the incidence is the highest, it was reported that there are about 70 HIV

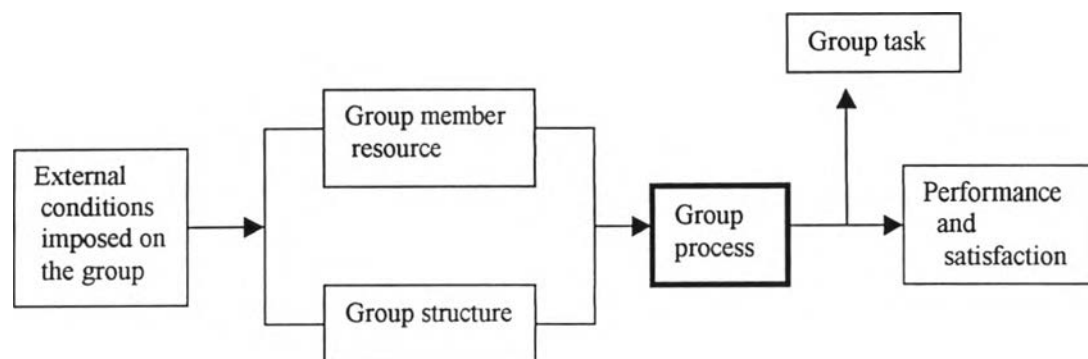
self-help groups with more than 5,000 members. Group benefits include of emotional support, better health behaviors, empowerment of members in finding occupational choice, fund raising and other community works. It should be noted that these groups also establish net-works at the local and national levels.

The above mentioned situation might be able to support the possibility and feasibility of using the group approach among people living with HIV. The tremendous growth of HIV self-help groups , would prove the potential of using group the approach for other similar health promotion activities. Hence, among pregnant women with HIV common experiences enhance group activities not only from problems of being HIV infected but also being pregnant.

2.5.2 Group Process Component

The term group process describes “the internal functioning of any type of group with all of the dynamic interaction among its members” (Sundeen, 1994). Group process is a major component of group behaviors that determine group performance and satisfaction (Robbin, 1998). The following figure can clearly explain group process’s functioning:

Figure 2.6: Group Behavior Model



Source : Robbins(1998)

Rosenfeld, 1973, has developed a model to explain basic component of small group process which consist of group composition, group structural variables, operating variables, task, out come, group atmosphere, environmental and time (Cooper, 1995).

In relation to group component, Hellriegel, 1989 identified seven factors that can influence group behaviors and performance i.e. group size, member composition and roles, group norms, goals, cohesiveness, leadership and external environment. Each factor is influentially interacts with each other

Group process is examined in terms of task performance, activity patterns within the group, interpersonal relationships and communication. In addition, the behaviors, roles, and issues that surface during the group meetings are important process factor (Sundeen, 1994).

The above mentioned details are examples of components to be considered in forming any type of group. However, individual groups may have different concerns based on group goals or the reasons in forming group.

Among pregnant women with HIV, the forming of groups is in the context of hospital activities. Group members are those who need either physical or psychological assistance. Based on some specific characteristics as mentioned group-forming protocol should be developed by hospitals as organizers and pregnant women with HIV as member. Group tasks would be the education and emotional outputs. Pattern of group discussion and relationship occurs would represent performance and satisfaction of group.

2.5.3 Group process functioning

As described earlier, in the SCT concept, the influence variables on behavioral change includes knowledge, skills, self-efficacy, expectation output and personal goal. Following are discussions about major group process functioning, which involved with these variables:

Interpersonal learning and sharing

In a group setting, participants can learn from each other (interpersonal learning). The exchange knowledge, attitudes among the group can create not only knowledge but also will encourage "problem solving process" more than other types of

education. Information and various experiences from the group can encourage finding **practical health choices** than individual instruction by health professional. Results of group problem solving are the synthesis of experiences and many health choices that individual's could apply to their living status.

It has been proved in many adult learning studies that learning from life situations (**life-centered learning**) will have much more efficiency than learning from the theoretical contents. Effective experiential learning will affect the learner's **cognitive structures, attitudes and values, perceptions and behavioral pattern**. "Peer information is often significant source of health knowledge....peers tend to exchange and examine attitudes regarding a particular issue in their discussion. **Attitude change** is more beneficial in promoting health behaviors (Nathee, 1998, Sundeen, 1994 and Johnson and Johnson, 1991.)

In addition, group learning will enhance group participation, which will support the effectiveness of learning as well as adherence to behavioral change. As it was found that " people are more geared to adopt changes when **they play a role in determining what the change will be** and how they will be effected" (Dignan & Carr, 1992). However, in the opposite situation, members **who do not have active participation will also have more chance to learn from others** compared with individual education, which requires high individual interaction.

Hence, **peer motivation** can create group **commitment** result in adherence to behavior change (Bishop, 1994, Sundeen, 1994, Nathee, 1998). In addition,

interaction in-group will help in transferring complex health information like HIV/AIDS into simple and understandable.

Mutual emotional support from peer

People living with HIV mostly have emotional problems. Group process functioning as peer support can respond to emotional needs of pregnant women with HIV. Members who have similar problems can provide emotional support to each other in ways the hospital health professional cannot. It was found that psychological impacts i.e. emotional stress, anxiety of the clients can directly effects to individual perception. A group setting can provide socialization for isolated individuals, which can make positive changes in psychological well being i.e. a **reduction in emotional stress** and a stronger feeling of being safe and sheltered. The reduction of these emotional problems, together with experienced learned and motivation from group will create self-efficacy and expectation outcome which are an essential factors in behavioral change (the SCT: Bandura, 1977).

In some situations, individuals can create meaningful relationships, **which** can go beyond the time span of the group. These relationships can reduce the sense of helplessness and will be essential factors for individual's adaptation.

In addition to the above two major characteristics, there are others additional advantages that support the feasibility of using group process. Considering the available resources of hospitals, group process education and group support *are cost-*

effective activities. Group process does not require more resources than casual education except logistical preparation and high involvement from staff. The activities, therefore can be *self-sustained by hospitals*.

Group education can access more targets at the same time compared to the individual approach. The group process and peer support can save hospital resources by covering the *two major tasks of educators and counselors*. In addition, group discussion can *save using of health education media* such as brochure distribution. Hence, the group process approach is *a tool for hospitals to access problems and needs of pregnant women with HIV*. As it is known that the problem of both HIV and pregnancy are dynamic depending on complications that occur and pregnancy gestation. In addition, group interaction can reduce gaps and *enhance relationships* between the health professional as facilitator and pregnant women with HIV as group members. Another advantage characteristic of group process education is *the assessment of activities*. The organizer can conduct *either process evaluation or outputs evaluations*, as the group discussion approach is a more formal setting than casual education.

2.5.4 Potential constraints and some ethical concerns

Group approach and confidentiality

There are two different perspectives in using group approach. The first is advantage gained from interpersonal learning, sharing, and mutual support. However, from another perspective, due to the discrimination against and stigmatization of

HIV/AIDS, the group approach, might effect confidentiality. Some people may prefer to keep their illness a secret until there is a great need to ask support from others. In some discussion topics, members may not satisfied or feel free to share their personal information, their experiences to the group. This could effects group atmosphere, individual role and group functioning. In this situation, using group approach may be ineffective.

There is no clear solution to the appropriateness of using the group approach because individuals may have different coping styles and needs in dealing with the disease depending on their former life experiences and other co-factors i.e. support from spouse, family etc. That is why, the willingness to join the group is the first fundamental step in establishing such a group. Clear protocol in the screening process, informed consent, group orientation and the relationship among members will improve the situation. The facilitators should re-assess members' feelings and try to solve problems for individuals so that it will not effect group function. In addition, group discussion should be held in a privacy location so that members feel comfortable to talk and to concentrate (Nathee, 1998).

Communication flow in group

The group achievement relies on the communication skills of facilitators. In addition, there are some potential constraints such as the inequality of health care providers as facilitators and group members as patients. This could effect communication flows in-group. In addition, facilitator's attitudes toward HIV/AIDS

would also effects their expression in-group. In this manner, a clear protocol on facilitator's roles should be identified and the internal feedback from teamwork is also important in improving the facilitators' role. (See roles of facilitator on appendix 2).

In addition to these two major constraints, members who are in emotional crisis stage may raised some negative experiences that increase anxiety and depress of others. Screening process to separate those who are not ready for group approach is needed.

Another limitation of the group approach might be time and logistical requirements. Hospital staff may need to have well prepared through cooperation and mobilization local resources including material, manpower etc.

2.5.5 Group process evaluation

When examining the group process, one of the primary tasks is separating the content and the process of the group. Content evaluation focuses on actual topics of discussion and facts; process evaluation focuses on inferred meaning attached to the topic or the basics for the topic (Sundeen, 1994).

2.5.5.1 Process evaluation includes the analysis of:

- A. Group set refer to group composition (size), group structure (communication flow and networks, climate) and operating variables (norms, value).
- B. Group functioning refers to interpersonal effectiveness, group cohesion, participation and distribution, decision-making, encouragement and constructive

management of conflicts, communication of ideas and feelings, problem-solving strategies etc. (See the example of these evaluation in Appendix 3).

Sources: Coper, 1995, Johnson and Johnson, 1991 & Sundeen, 1994.

2.5.5.2 Output evaluation refers to the evaluation on the increasing of knowledge attitudes and skills of individual and groups on the education contents. Meanwhile, this also includes the impact evaluation of emotional health change from group functioning.

In addition there are another evaluation, **outcome evaluation** which, refers to the evaluation of behavioral change or self-care practices, which is the ultimate goal of the activity. The outcome evaluation is not applicable for hospital based program. However, there are some hospital statistics that can indicate some aspects of health behaviors i.e. ANC attendance, post-partum follow-up rate.

2.6 CONCLUSION

We can reduce the impact of pregnant women with HIV through promoting well being and good health status. One most feasible intervention is to encourage changing behaviors and having positive lifestyle. Pregnant women need to have better health practices than others. Moreover, having chronic disease like HIV, there is a greater need to have positive lifestyles for preventive, curative and rehabilitative aspects. Among pregnant women with HIV, health education during pregnancy is the most feasible period. The women normally have more concern on their health and child

health much more than other period of life. Majority of pregnant women will usually have ANC visit at least on a monthly basis. The education program can be continually set-up. Health education during asymptomatic stage is feasible than when people reach to the illness stage.

Changing behavior is a complex issue related to individual's physical and psychological factors as well as environmental factors. Casual education, which has been conducted in many hospitals, is insufficient to deal with attitudes, skills and some psychological factors like self-efficacy, personal outcome etc. These factors are essential inputs for behavioral change.

The proposed intervention, small group discussion emphasize group process, can involve cognitive factors i.e. increasing knowledge and skills of members. Active group interaction, experiences learned as well as psychological support from group can enhance self-efficacy. Members can learn from others about health choices and adapt to their situation better than through theoretical learning. Mutual support can reduce emotional stress and anxiety, which is also an essential factor to develop self-efficacy. Group process approach, therefore is an effective health education method which can respond to both physical and psychological needs of pregnant women with HIV. The outcome of group process functioning will be the performing good health behaviors and life-style, which will increase their well being feeling and their quality of life not only during pregnancy but also for the rest of the women life.

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