Chapter III

Proposal

The Effects of Group Process Education On Knowledge, Skills, Anxiety And Depression in Adopting Healthy Life-styles Among Pregnant Women With HIV at Nopparat Rajathani Hospital

3.1 TITLE PAGE

A. Project Location : Nopparat Rajathani Hospital, Bangkok

B. Target Group : 80 cases of Pregnant Women with HIV

C. Project Duration : January 1, - December 31, 1999 (12 months)

D. Funding Support in Baht

Total project cost	:	70.,000
Funding support from Chulalongkorn University*	:	50,000
Contribution from others	:	20,000

* The Rajadapisek Sompote through Dr. Sathirakorn Pongpanich , College of Public Health

E. Implementing Organization : Nopparat Rajathani Hospital

3.2 Rationale of the study

3.2.1 Impacts of pregnant women with HIV

Pregnant women with HIV is a major maternal child health problem which directly affects to the health of both mother and child. . It is known that becoming pregnant is a risk and one of the most stressful life events in women's lives. Becoming HIV positive is even far risk and more stressful. Pregnant women with HIV are more likely to have complications such as miscarriage, fevers and infections, premature labor, low birth weight, and infection after delivery (WHO, 1995). It was reported that becoming pregnant can weaken the immune function. Pregnant women with HIV w ll have lower resistance to infections. Hence. pregnant women who are in the acute and asymtomatic stage will have potential HIV/AIDS complications such as fever, fatigue, rash, pharyngitis etc. (Rukroongtham, 1998). In addition, to these physical impacts, pregnant women with HIV will have to cope with various psychosocial problems such as fear and discrimination from their families and society, anxiety about their health status and the chance of transmitting the virus to their newborn children. Social and especially health professional support of and assistance to these women is needed to help them pass through this life crisis and maintain their health status.

HIV infection among pregnant women is a consequence of the increasing number of infections in reproductive group. Globally, UNAIDS estimated that out of a total of 30.6 million cases of HIV infection, 40 percent or 12 million are women (UNAIDS, 1998). In Thailand, it is estimated that out of 800,000 HIV infection cases, eighty percent are in reproductive age groups and forty percent are women (AIDS

Division, 1997). As a consequence, the number of pregnant women with HIV is increasing rapidly from less than 1 percent of total pregnancies in the country in 1991, up to more than 2 percent in 1996. In some northern provinces, the infection rates were up to 5-6 percent

To encourage social concern about this issue, the government has announced 1998 to be the year of "*save mother and child from HIV infection*". Many involved organizations have attempted to create a number of activities. However most, focus e on reducing HIV transmission from mother to child through using anti-viral therapy. Recently, in mid 1998, one successful trial study the (Bangkok Regimen Study) reported success in reducing perinatal transmission from average of 24.2 % in non breast-feeding mothers to 9.2 %. (MOPH Seminar report, 1998). However, it might be too early to evaluate the long term physical and psychosocial impact on these children. Nobody can guess, how these children will grow-up. How will they have good care if their mothers have been sick or died from HIV/AID?. As mentioned earlier, the trend of pregnant mothers who are infected is increasing. This study will therefore, focus on the health of these mothers. One notable fact of HIV infection is that "being HIV positive does not mean the terminal stage of life". These women have a potential to live for a number of years, to care their new-born children and their families, and to have normal productive lives in society, if they pass through this critical period and if they have self-care ability enabling them to adjust and control their health status.

3.2.2 Hospital health education

Hospitals are potential source for health education particularly among those who are sick. "Health education in hospital includes not only in information provision but also the facilitating and encouraging of positive life style changees and compliance in treatment regimen and the adherence of positive health behaviors" (Nathee, 1998). "In promoting health status of pregnant women , Antenatal Care (ANC) is one of the key strategy. All pregnant women must have ANC especially if they have HIV infection" (WHO, 1996). It was reported that, most women in Thailand first learned their infection from blood testing at an ANC clinic (Shaffer, 1996). An ANC clinic is the first gate and most feasible area in providing assistance to these women. Considering that pregnant women with HIV will regularly attend an ANC clinic, this study found the potential to have a continuous intervention program among these target women.

The proposed intervention, group process education, has been proved effective by various studies on the effectiveness comparing many others health education methods (Nathee, 1998). Group process has been accepted as an effective tool to increase learning efficiency in school, the business sectors and in many other learning aspects (Johnson & Johnson, 1991). Group process education is not an innovative intervention, the concept has been used for educational purposes in many chronic diseases. The Group process concept through self-help has been applied to many HIV/AIDS emotional support purposes. However, to integrate these two purposes with pregnant women with HIV who have specific characteristics, might require approaches different from those for other target populations.

This study aims to develop a model in using " group process health educatio.." and peer support for behavioral changee among pregnant women with HIV who visit ANC clinics.. Health education outputs is the increasing knowledge, skills on behaviors or life-styles changee including self-care practices. Meanwhile, peer information and peer support could increase motivation and reduce emotional depression and anxiety. Active interpersonal learning and sharing will encourage participation , enhance problem solving and decision making on practical health choices which is better than learning from health professionals. These factors lead to the adaptation and coping ability to adopt positive life-styles. The outcome of better health status will be not only during pregnancy but also after the delivery and for the rest of their lives

3.3 Background of target hospital : Nopparat Rajathani

Nopparat Rajathani is a government hospital located in Minburi district, Bangkok. The hospital was established in 1982 to serve the population in the upper-northern area of Bangkok. The following are some statistics:

Table 3.1 Nopparat Rajathani: Organization Statistics.

Number of Beds	**510**
Number of staff	**1,630**
Number of physicians	**70**
Number of nurses	**470**
Number of educators	**3**
Average OPD patients per day	**1,600**
Average ANC attendance per day	
Average delivery cases per day	**33**

Sources : Nopparat Rajjathani : 1998 (fiscal year budget October 1997-September 1998)

The hospital 's location is in the sub-urban area. According to the needs assessment survey among pregnant women with HIV, it was found that the majority live in nearby areas. The hospital is recognized for providing good care for HIV/AIDS cases. According to the Thai Red Cross report in 1997, Nopparat Rajathani is among the top three hospitals in the country which received AZT support from the Thai Red Cross to reduce transmissions from mother to child. Following are some statistics concerning normal pregnant and pregnant women with HIV:

Table 3.2 Statistics relating to pregnant women with HIV

Fiscal year (October-September)	1994	1995	1996	1997	1998
% of normal pregnancy	1.3	1.6	1.6	1.7	1.7
New cases who visited ANC	101	129	124	133	129
Hospital delivery	122	N/A	183	178	N/A
Average number of ANC attendance		N/A		Mar 97 - Jan 99 (43 cases/week)	

Source : OPD / Laboratory and ANC clinic Nopparat Rajathani : 1998

Another notable statistic is that the number of general HIV/AIDS cases who visited OPD has been increasing from about 5, 000 cases per year in 1994 to almost 10,000 in 1998. All the presented statistics have indicated trends of increasing numbers of HIV/AIDS patients including the number pregnant women with HIV.

The hospital is feasible for the study intervention due to the following reasons:

1. The hospital is not located in city areas where the target group has deal with traffic.
2. Most target group members are housewives who live in surrounding areas. This could enhance their chance to participate in group activities.
3. The number of attendances are not so many as to interfere with ANC operation that make too busy ANC and do not too less and too few to organize group activities.
4. Readiness of involved staff has attempted to improve health education work for the target group.

3.4 PROBLEM STATEMENT

Based on health education and communication principle, there are four major factors related to the education process; the hospital as a source of information, pregnant women with HIV as clients, educational content and the channel or educational methods to be used. In addition, the environment or context in which education occurs also affects the educational process (Boonsri and Siriporn, 1997, Sundeen, 1994). The review of problems here will be in the hospital context as the target group consists of those who visit the ANC clinic;

"Basically the provision of health education for pregnant women with HIV has been done on a non-formal basis with multi- educational approaches. Health education methods include *individual instruction* during ANC check-up. During In some occasion. From time to time, a *standard audio-visual* such as *video and slide presentation* will be given to the group in the front of an ANC room. *Printing media* will be provided the availability as well as *poster advertising*. In some special occasion, such as the Majesty Queen Birth Day, the hospital will conduct a *seminar or exhibition* in some selected issues such as transmission from mother to child, nutrition etc. In addition, from time to time *group counseling* is also a source of information among these target women. In conclusion, all mentioned health education methods are on casual based . As in many other hospitals, Nopparat Rajathani health education activities are not as high as in the priority as many other curatives services. Although, we could not access the ratio of budget allocation to health education works, the mmanpower resources in table 3.1 clearly indicate the crucial problem relating to hospital health education. Due to the limited manpower, health education among

pregnant women with HIV has been provided by different hospital units on a casual or ad hoc basis as follows;

Table 3.3 Health education sources and purposes

ANC clinic	Details of ANC services i.e. pregnancy check-up, immunization, vitamin distribution, follow-up schedules.	Individual instruction Advertising poster Distribution printing media
HIV/AIDS Project*	Prescribe regimen, and chance of transmission	Individual instruction
Counseling unit	Emotional support, general information relating to pregnancy and HIV /AIDS	Individual -group counseling
Health education units	Health practices for pregnant women	Exhibition, advertising poster

* (A special unit for distribution anti-viral drugs to reduce transmission rate)

Aside from these, there are also some other involved units i.e. OPD (Out Patient Department), Laboratory and pharmacy. All of these mentioned units are involved in providing information and some education to pregnant women with HIV.

Due to the many units involved, the first identified problem found is the lack of a standard protocol and mutual direction on education works for pregnant women with HIV. Each unit has its own interest and has different approaches in providing

information. Following are some problems raised by involved staff from general group meetings during the needs assessment process of this study.

Problems of hospital management

A major problem of hospital management is the lack of co-ordination among staff involved with pregnant women with HIV. This problem has results in the lack of resources mobilization and duplication of roles in each unit. It is possible that patients will learn the same information from different units. Another identified problem staff workload and time limitation in preparing health education content and media to be used. This also affects the accuracy and the up-date of information. In relation to this it was found that the communication skills of some staff are also an obstacle in the education process. In addition, the lack of health education media such as specific media target pregnant women has also affected to the concentration of target pregnant as well as the effectiveness of health education. Another major constraint is the long process of pregnancy check-up that make limited time for health education.

(Source: Group interviewing among involved staff of Nopparat Rajathani Hospital on November 3, 1998)

Education methods Problem

As mentioned earlier the hospital has used a multi-educational approach on a casual basis which has some of the following limitations:

1. Limitation of individual instruction : costly per participant, time consuming , less interaction due to emotional problems such as shyness and a rushed aatmosphere.
2 Limitation of using standard audiovisual aids i.e. Video /slide presentation : one-way communication can not feed-back, too generalized, chance of miss-interpretation and low concentration.
3. Limitation of advertising board : low concentration, information outdated.

In addition, the lack of target assessment especially on health education readiness has limited designing proper content as well as appropriate methods t be used. Due to the number of disparate staff participants and methodologies used and informal educational structure, former educational program is difficult to evaluate.

In order to find solution for the above mentioned problems, a health education committee, consisting of staff from the four units , has been formed. The committee and the researcher have worked together to propose interventions to increase effectiveness of health education activities among pregnant women with HIV.

3.5 Purpose of the study

3.5.1 Purpose for pregnant women with HIV

Pregnant women with HIV need to have better health practices and health behaviors more than others. Outputs of group process education and peer support will

be able to increase knowledge, skills and motivation in having a healthy behavior. Peer information and support will reduce psychological problems and will increase confidence of the target women in adopting information and experiences learned to their lifestyles. It is expected that target pregnant will be able to maintain their health status and to increase their well-being feeling to cope with the disease physically and mentally.

3.5.2 Purpose for the organizer hospital

From this study, the organizer hospital will learn the appropriateness of using the group approach among these target pregnant women. Lessons learned can be used for designing a group process as an alternative or an education component to increase the effectiveness of hospital education.

3.5.3 Goal

The study goal is to maintain health status of pregnant women with HIV to prolong symtomatic stage of AIDS in order to lives normally and productivity.

3.5.4 General Objective

To develop an appropriate model of group process education on healthy life-styles among pregnant women with HIV who attain ANC clinic.

3.5.5 Specific Objectives and measurement indicators

1. Within the twelve month of the study, 30 sessions of group process education on healthy life-styles will be conducted for 80 cases of pregnant women with HIV who attain ANC clinic of Nopparat Rajathani Hospital.

Measurement indicators: Number of sessions, number of target participant, number of staff involved, level of staff participation, working performance, appropriate of supplies and equipment used.

2. To identify the association of group process component and group functioning as an education method among target pregnant women.

Measurement indicators:

Group process component: group size, level of members' participation and communication flows.

Group process functioning: members' satisfaction, relationship occurs, group atmosphere, group activities such as problem solving, discussion solution, decision making, relationship occurs,

3. After attaining 4-6 group process education sessions, target pregnant women will gain knowledge on the following topics:
   - HIV/AIDS transmission from mother to child
   - HIV/AIDS treatment
   - Nutrition for PWAs
   - Warning and danger signs of pregnancy and HIV/AIDS complications

Measurement indicators: Level of knowledge from pre-post tests, accuracy of discussion content in-group.

4. After attaining 4-6 group process education session, target pregnant women will be able to perform the following health practices:
   - Exercise in PWAs
   - Safe sex
   - Milk-powder preparation and child care
   - Emotional coping
   - Breathing practices for delivery.

Measurement indicators: Level of knowledge and practices from pre-post test score, demonstration skill in-group.

5. From the attending of group process education and group activities, target pregnant women will improve their psychological adaptation to HIV/AIDS

Measurement indicators: Level of anxiety and depression from pre-post test, group interaction, level of group participation and contribution, peer relationship occurs

3.6 Study Methodology

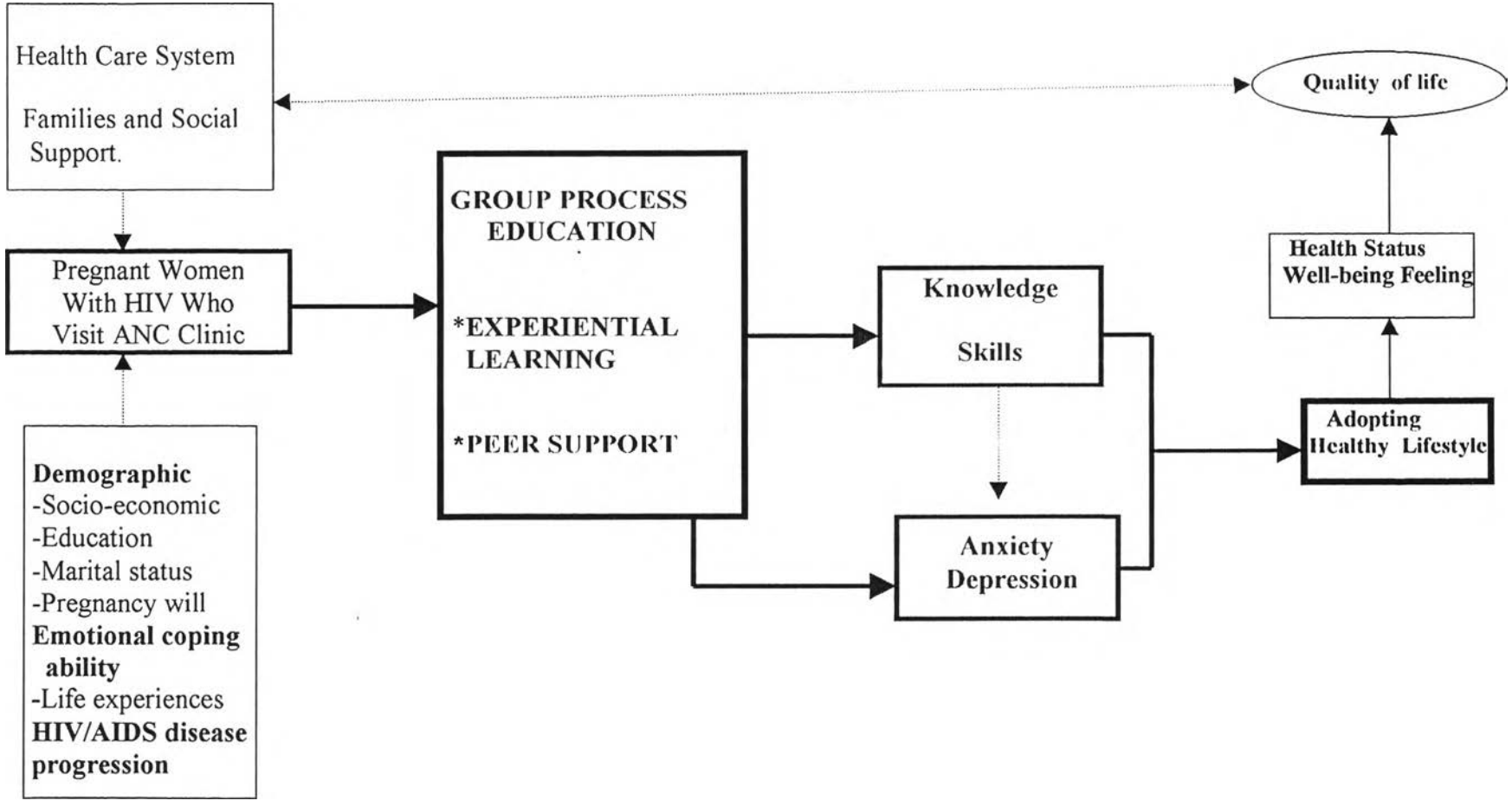
3.6.1 Conceptual Model of the study

The concept of the Social Cognitive Theory (SCT: Bandura, 1986) is appropriate to explain the role of each variable in this study. The SCT describes human behaviors as being reciprocally determined by internal factors and the environment in

which people lives. There are two cognitive processes, which influence individual behaviors: outcome expectation and self-efficacy. The outcome expectation refers to individual's belief that a behavior will produce a specific effect. Self-efficacy refers to one's belief in their own ability to perform the behavior. Communication and psychological process influence both of these key factors, which represent group process. The group process approach is compatible with Bandura's belief that *vicarious learning*, or learning through observation, is an important method of acquiring information and skills (McKenzie & Jurs, 1997, Kaplan, Sallis & Patterson, 1993).

In this study, the target group will learn **knowledge and skills** through group process education. Both knowledge and skills are fundamental puts for outcome expectations and self-efficacy. Mutual support from peers and relationships formed among peer will reduce **emotional distress, anxiety** and effect adaptation ability to cope with HIV/AIDS problems. All of these factors could influence in adopting healthy lifestyles of target pregnant women. The following model in figure 3.1 shows the relevance of these factors:

Figure3.1 Conceptual Model : The Effects of Group Process Education On Knowledge, Attitudes, Skill, Anxiety and Depression in Adopting Healthy Life-styles Among Pregnant Women With HIV (Modified from the Social Cognitive Theory: Bandura 1977, 1986).



3.6.2 Study design

This study is a descriptive action research with one group pre-post test that aims to develop a role model using group process education and peer support as a component of other ANC activities. As mentioned earlier about the effectiveness of using group process education in many other health promotion fields, the study design will not compare the effectiveness of using of group process education with other education methods. The focus will be on identifying the role of each factor affecting group functioning and performance.

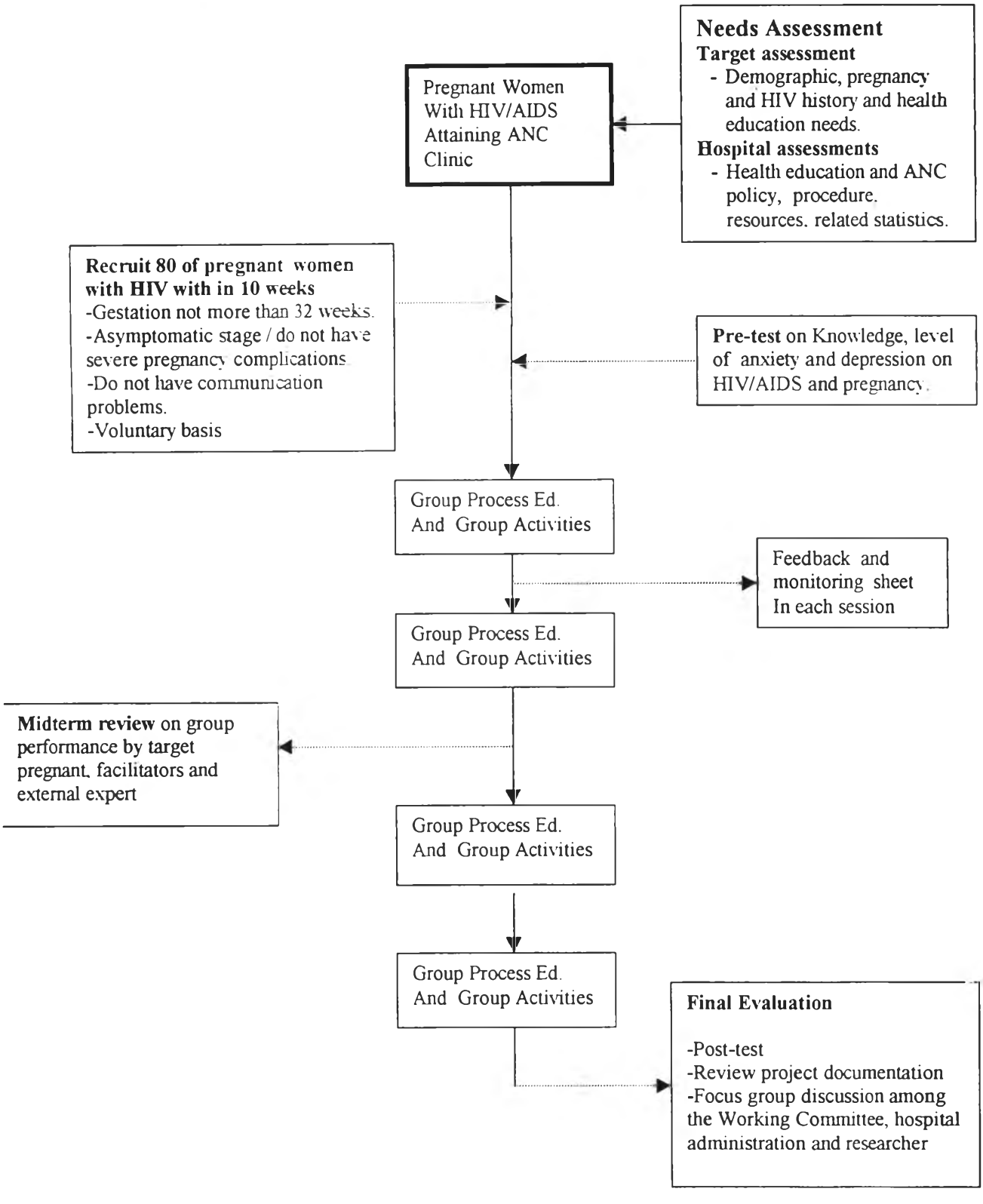
Within the twelve month study period, the first 3 months are dedicated to the needs assessment and program planning including preparation of education content and the recruiting of the target population. From the purposive sampling, an average of 80 cases of pregnant women with HIV will be recruited. According to ANC protocol, the following are prescribed schedules for ANC attendance of pregnant women with HIV based on the gestation period;

Gestation	Schedule
Less than 24 weeks	once a month
25-32 weeks	twice a month
above 33 weeks	once a week

(source : ANC clinic : Nopparat Rajathani Hospital)

It is estimated that each target pregnant women will visit ANC an average of 4-6 times. A series of 4-6 education sessions will be provided to group members upon these ANC visits. Pre-and post tests for knowledge, attitudes, anxiety and adaptation ability will be collected individually at first recruitment and at the end of the study period. The following diagram describes the framework of the study:

Figure 3.2 : Framework of the study



Remarks: Each pregnant women will attain at least 4-6 sessions of group process education depending on their starting ANC and gestation period.

3.6.3 Plan for data collection and data management

Table 3.4 Plan for data collection

Phase	Technique	Respondants /sources
Need Assessment	Review of secondary data	Target hospital
		Other related sources
	General group interview	Hospital staff
	Interview Questionnaires	Target pregnant women
	Focus Group Discussion	Target pregnant women
Program Planning	General Group Meeting	working committee
Implementation	Pretest-post test Questionnaire	Group members
	Observation	working committee
	Focus group discussion	Group members
Monitoring and evaluation	Focus group discussion	Group members
	Questionnaires	Group members
	Observation	External expert
	Secondary data	Hospital statistics

Multiple techniques as mentioned above will be utilized to access to the requires information. Data collection will focus more on *qualitative* information i.e. focus group discussion, observation. However, *quantitative* data i.e. some group statistics will be used. In addition, to ensure accuracy of information the triangulation technique will be utilized particularly for monitoring and evaluation purposes i.e. using different sources of data i.e. group members, external expert, working committee and hospital data to examine the group's activities. In addition,the data will be from both *self-reports* and *direct observation.*

The researcher will conduct an orientation meeting among those who are involved to review overall methods and require tasks as well as to design the schedule of data collection. The monitoring forms for data collection will be developed.

Designing the data collection in this study has taken into account confidentiality and the physical and emotional conditions of pregnant women with HIV. Informed consent and confidentiality of data will be applied . Meanwhile, as "working committee" consists of hospital officers who have their own tasks, methods to be used will not require much more time and are feasible for efficient logistical management. Following are some details of techniques to be used ;

Review of secondary data

The study will collect some relevant information from ANC, OPD , the counseling unit, HIV/AIDS project etc. A short form in recording this information will

be developed. The working committee will be responsible for collecting the data on a weekly and monthly basis. Information from reviewing of secondary data will be used for both technical and logistic purposes. The advantage is that the working committee are professional who familiar with this data. This will not create burden to the existing information system of hospital. Hence, this methods do not consume much time and do not require any cost.

Questionnaires

There are two types of questionnaires to be used in this study:

- Interview questionnaires will be used during the needs assessment process
- Self-administering written questionnaires will be used during implementation and monitoring process.

Interview questionnaires will be undertaken at the ANC clinic waiting areas. The major purpose is to assess the need for and interest in educational content and methods. Interviewers are trained nursing students so that the respondents will feel free to answer since there are some issues related on the performance of the ANC staff. Most questions are close-end with ordered choices but also includes a few open-ended questions. The advantage of using this technique is the standard sequence of information. However, this method requires team work and consumes more time. In the case of pregnant women with HIV in target hospital, most have low to moderate educational background (primary school). It is necessary, therefore, to use this technique. (See Appendix 4: Questionnaire Form).

Self-administering questionnaires will be used to evaluatee member's feelings about group activities. Using this technique will make individual members feel free in responding. This form will be used at end of each group activityy to monitor group performance. Information will be used to improve group activities and to measure the progress of member's emotional feeling towards such activities. (See Appendix X for evaluation questionnaire).

Focus group discussion

There are two major purposes for using focus group in this study:

- The first is during program planning, after obtaining information from interview questionnaires. The purpose is to get more in-depth information on major concerns. knowledge, attitudes towards health education topics and group process methods. At least 2-3 focus group discussions will be conducted.
- The second purpose is for monitoring and evaluation. The idea in using focus group discussion for in this purpose is these women are alrea y familia with the group discussion approachh and it is accept that " meeting are good sources of information for process evaluation" (McKenzie and Jurs, 1993).

Observation

As the major activityy in this study is group process or group dynamic, group change occurs from time to time. The advantage in using this approach is that it " gives more detailed and context related information". In addition, observation can get information on facts not mentioned in the questionnaires and can test reliability of responses to the questionnaire. Key observation forms will be developed, based on measurement indicators i.e. communication flow, demonstration skills, level of participation etc., Facilitators and staff involved will fill these forms on a random bas's at least or at least every other month.

3.6.4 Study population

The target group in this study are about 80 cases of pregnant women with HIV who visit ANC the clinic at Nopparat Hospital during the first three months of the study period. Rationale for using 10 week period is based on an average weekly ANC attendance which is about 10-15 cases. Considering that the majority or about 70 % are in the 20-30 weeks gestation, recruiting process therefore will take about 8-10 weeks . Most of these pregnant women live near the hospital in Minburi district. The inclusion criteria are:

A. Gestation not more than 24 weeks: The gestation period will affects to the completion of education contents. Each pregnant women will have to attend at lest four sessions. If the gestation is more advance, they may not be able to complete this requirement and their physiological change may limit learning session.

B. Target pregnant women must not have any serious illnesses or ccomplications that would constraint for learning and sharing in class

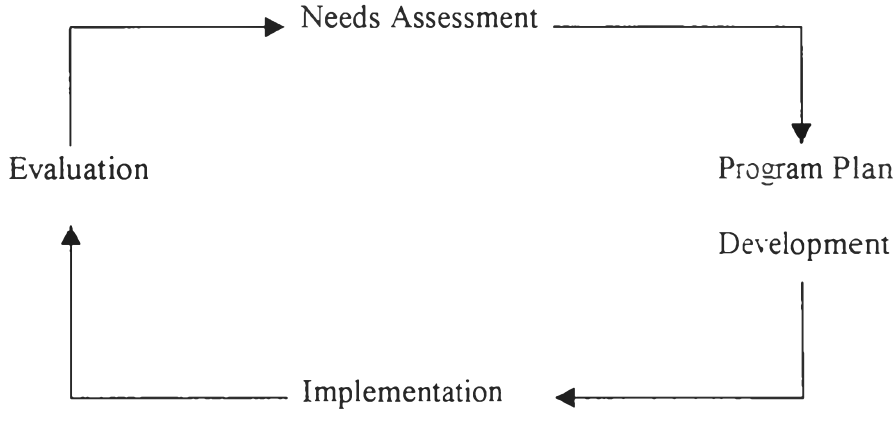
C. The women must be able to communicate. Communication is the most essential activity in group discussion and support groups. Target pregnant women must not have any problems in hearing, listening and speaking.

D. Voluntary: This criteria is the major ethical concern Pregnant women with HIV will be informed the objectives, expected role etc.

3.7 Intervention Design :

The planning for group process education in the target hospital can be divided into four processes as shown in the following figure:

Figure 3.3 : Health Education Process



Source : Modified from Dignan & Carr, 1992 and Nathee, 1998

3.7.1 Needs assessment

the purposes of need assessment for health education activities are to identify problems, needs of the target group and available hospital resources (Dignan and Carr, 1992). In this study, the needs assessment conducted by researchers includes:

the in-depth interview with involved staff i.e. ANC nurses, educators, counselors and physicians to identify health education system problem for the target group, to determine hospital policy on health education and management of target pregnant women to identify available resources such as the number and qualifications of staff involved, the budget for health education activities, and other related program/scheduleling aspect among target pregnant women i.e. ANC pattern etc.
Reviewing hospital secondary data related to the target group such as statistics and trends of ANC cases/ delivery cases per year, month and week.

3.7.2 Program Plan Ddevelopment

There are four units in the hospital that directly will be involved in the program planning i.e. ANC unit, HIV/AIDS project, health education unit and counseling unit. A working committee comprised of staff in these units has been formed . It is planned that the working committee will spend about three months to finish tasks in this period. Major tasks focus on the preparation of health education content and group formation which include;

1. Set-up tentative health education topics to be discussed with group members. Review available health education media and equipment to be used.
2. Resource planning and mobilization such as contacting local resources in the hospital and external resources that can support or participate in the project. For example the working committee has been requested in-kind support from the powder milk powdered company to sponsor milk/ soft- drinks for the pregnant mother during group activities.
3. Prepare venues for group process sessions. "Group sessions should be held in a private and convenient atmosphere so that they will encourage concentration and learning motivation" (Nathee, 1998). Since the activities will be held after pregnancy check-ups the venue , should be nearby ANC areas.
4. Develop pre-post test questionnaire and question guildeline to be used before starting group process education and after completing the course or before delivery.
5. Prepare the facilitators readiness in conducting group process education. Develop a draft of group expectations, roles and functions and group regulation.
6. Design the monitoring system i.e. communication system among working committee members and between working committee and others, design monitoring tools i.e. form, question guideline, observation guideline etc.
7. Recruit members. It should be noted here that the group in this context refers to the formation of an formal voluntary group. "Group education" will be formed by hospital 's staff upon ANC visits.

However, in addition on group process education, target pregnant women will be encourage to form and organize informal voluntary group. This group is expected to be an incentive for target pregnant women to participate in more flexible group activities based on their readiness and interest. Group meetings and group activities will be based on members mutual agreement. From participation, target pregnant women would become familiar to each other. This will enhance group cohesiveness which not only reduces emotional difficulty and anxiety but also will promote readiness in joining group process health education..

3.7.3 Implementation

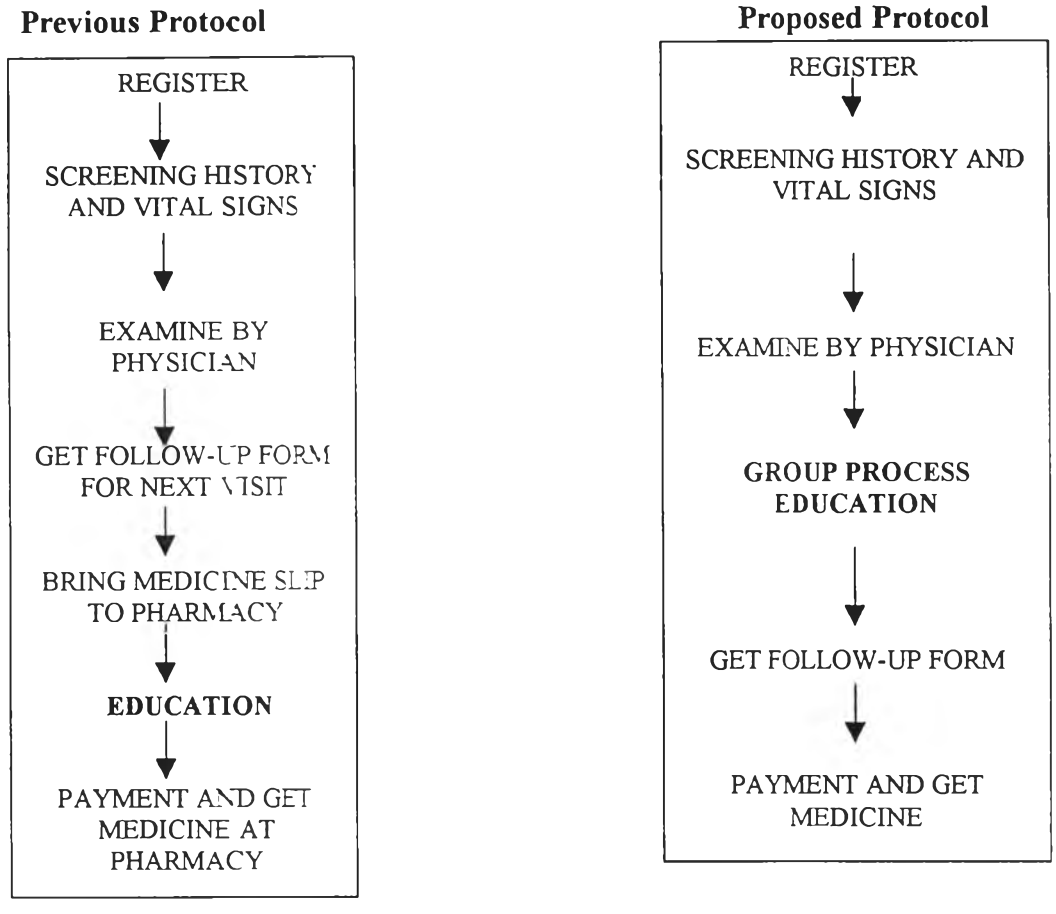
There are two major functions in group activities: health education and group recreation activities.

3.7.3.1 Health education activities:

Group forming: As mentioned earlier that recruiting process will be done during the first 10 weeks or during program planning process. The Out patient Card (OPD card) of these target women will show mark stamp that make different from others. In addition, a recording form for group attendance will be attached with the OPD card. These will help ANC nurse easily to identify target group of the study.(see appendix 3: Monitoring Form). In addition, these mark signs will also benefit to the determining follow-up date of these target group which try to arrange same group to meet in the next session. The target pregnant will attain group activities at the end of their ANC process. It is estimated that group size will be about 3-12 participants.

Schedule and venue: As the ANC clinic for target women has been scheduled on every Wednesday afternoon starting from 12 o'clock, the proposed group education will be set therefore on every Wednesday for an hour at 2 to 3 o'clock. According to the questionnaire interview given 30 target pregnant, during the need assessment process, it was found that the average time needed for each ANC visit is about 2-3 hours. It is planned that the proposed intervention should not be a period much longer than before as longer time will affect the health concentration of these target women. According to the study of 279 pregnant women who visited ANC in five Bangkok hospitals, it was found that health education concentration has directly associated with the anxiety in completing the whole process of the ANC clinic (Chuanchan, 1990). In this regard, the study proposes to short some previous ANC processes as shows in the following figure:

Figure 3.4 ANC Process



Major activities of group education are discussion or interaction among members. However, to enhance the productivity of the session, the facilitators will play major roles as instructors to provide some basic information at the introduction period of each session. After that, facilitators will encourage group discussion regarding to the planed topics. The discussion theme will based be on the planned topics but flexible based on feed back and interest of group members. It should be noted that most session will combine skill training to develop confidence of the target pregnant women. Skill training will emphasize on demonstration such as the demonstration the exercising for pregnant with HIV by physiotherapist, the demonstration of meditation etc. Participant

will be encourage to practice these skills in the session. In addition to these, additional health education media such as slide or video presentation will be used to lead the discussion.

3.7.4 Education content:

The following are purpose of each education topic for future designing teaching curriculum.

Table 3.5 Education Content

Information	Develop single skills	Adopting into life-styles
- Treatment of HIV/AIDS (prescribe regimens) - HIV transmission from mother to child. - Observing warning or danger signs of HIV/AIDS and pregnancy complications.	- Safe-sex - Physical exercise - Emotional control by meditation - Breathing exercise for delivery. - Milk-powder preparation (child care).	- Hygiene - Nutrition

3.7.3.2 Group recreation activities

To encourage group interaction and relationships, group activities will includes some recreation activities. This study has proposed a flexible fund to initiate some activities based on interest and readiness of group members. These activities includir g handicraft works, sewing baby cloth, visiting friends who have delivered, a saving fund for delivery etc. It is expected that these activities will encourage group cohesiveness and relationship, which will reduce anxiety and emotional distress as well as increase group interaction and discussion.

(Monitoring and Evaluation of group process education will be discussed in 3.9)

3.8 CALENDAR OF ACTIVITIES

	ACTIVITIES	1999												RESPONSIBILITY PERSON
		J	F	M	A	M	J	J	A	S	O	N	D	
1.	Informal assessment : - Review related literature - Hospital visit to identify the problem , explore ideas with Staff.													Researcher (from August-September 1998)
2	Visit hospital administrator General group interview with Involved staff													
3	Develop the proposal													
4	Submitted proposal to RPF	X												
5	Follow-up													
6	Revised final proposal	X												Researcher and hospital staff
7	Form working committee	X												Researcher and hospital staff
	Needs assessment													
8	Design expectation and data collection technique	X												Researcher and working committee
9	Data collection	X												Researcher
10	Data Analysis	X												Researcher
	Program Planning		X											
11	Set-up education topics													Researcher and working committee
12	Review the available resources i.e. health education media, equipment and supplies to be used	X	X											Working committee

	ACTIVITIES	1999												RESPONSIBILITY PERSON
		1	2	3	4	5	6	7	8	9	10	11	12	
13	Prepare education contents , media equipment, venue		X	X										Health Education and counseling unit
14	Determining group composition and group performance		X											Counseling unit
15	Develop project formats													Working committee
16	Testing and revising format		X	X										Working committee
	Implementation		X											
17	Recruit group members				X									ANC clinic
18	Pre-test questionnaires			X	X									ANC clinic
19	Group process health education Every Wednesday afternoon		X	X	X	X	X	X	X	X	X		X	Working committee
20	Other group activities		X			X	X	X	X	X	X		X	Working committee and members
21	Post-test questionnaire				X						X		X	
	Monitoring and Evaluation													
22	Monthly meeting			X	X						X	X		Working committee ANC Unit
23	Collect data / formats				X	X	X	X	X	X	X	X		Working committee Hospital M/E unit
24	Submit report to RPF			X		X	X	X	X	X				Hospital M/E unit/working committee and researcher
25	Focus group discussion on group Performance among target group.			X								X	X	
26	Mid-term review							X						
27	Final evaluation meeting							X				X		
28	Final report							X					X	

RPF = Rajadapisek Sompote Fund / Chulalongkorn University
Working committee = The hospital staff from ANC clinic, Counseling clinic, health education unit and HIV/AIDS Project.
Hospital M/E = Hospital Monitoring and Evaluation Unit

3.9 Feasibility of the study design

The ffollowing reasons are the advantages and feasibility of using group process education among pregnant women with HIV:

1. The group process approach is feasible for intervention that aims at behavioral changee. Group process can create adherence behavioral change. In group setting, participant can learn from each other (interpersonal learning) . The exchange knowledge and attitudes among the group member can create more motivation in problem solving than other types of education. The group education outputs is the synthesis of *experiences and many health choices* that individuals can apply to their lives. It has been proved in adult learning that learning from life situations (life-centered) is much better than from theoretical contents (Nathee, 1998). In relation to this active *problem-solving role*, participation in the group will Cretee motivation. It was found that " people are more eager to adopt changes when they play a role in determining what the change will be and how they will ' e afetched (Dignan & Carr, 1992). In addition, peer motivation, *therapeutic value* from group and *group commitment,* can lead to the adherence of behavior change (Bishop, 1994 , Sundeen, 1994, Nathee, 1998).
2. *Group process can transfer complex and dynamic content like HIV/AIDS contents or physical change during pregnancy into simple and understandable* terms through group discussion, sharing mutual complications or learning from other successful cases etc. In addition, in the group setting, it seems more interesting and cost-effective to explore or demonstrate some complex activities to ensu.e understanding and to increase participant skills.

3. *Group process can respond to participants' emotional needs.* It was found that psychological impacts i.e. emotional distress and anxiety of the clients could directly aaffect to perception of the individual. Group discussion and activities can reduce the anxiety and increase the perception capability of pregnant women with HIV. It is known that people living with HIV mostly have emotional problems. Group process functioning is similar to a self-help group. Members who have similar problems can provide emotional support for each other in ways the health professional in hospital cannot. The effects of group support can lead to positive change in psychosocial well-being i.e. a reduction in emotional stress and a stronger feeling of being safe and sheltered. In some situations, individuals can create meaningful relationships and these relationships can go beyond time span of the group. (Weiss & Lonnquist, 1996, Sundeen, 1994.)
4. Group process *does not require so many equipment or many resources.* Group process education or small group discussion is a simple and cost-effectiveness method. Group members are the source of knowledge. The facilitator's or educator's roles will be less than in other education methods. In the hospital setting, group discussion or group process education can be self-sustaining without any external support.

3.10 Monitoring and Evaluation of the Study

The information will be from triangular sources i.e. hospital staff involved, pregnant women with HIV and external evaluators. In addition, information will be collected in the different time period upon monitoring and evaluation schedule. Methodology to be used will be from both self-reporting and direct observational.

3.10.1 Project Monitoring

Monitoring tools includes monitoring forms which will record individual attendance to group activities and group record forms which will include details of group performance (see appendix X : Monitoring forms). In addition, to have regular assessments of group performance, observation forms will be developed for internal use by involved staff. It should be noted here that feed-back from members and related staff will be reviewed on a bi-monthly basis to improve project activities. Hence, after a few months activities or during project mid-term, external experts will be invited to review and observe group functioning. This information will be used for developing further plans for the reminder of the project's life.

3.10.2 Project Evaluation

There are two steps in measuring the intervention outcomes;

Measuring the education process: The measurment indicators as mentioned on page 60 and 61 will be evaluated. Evaluation tools are direct observation forms, self-administering questionnaires, focus group discussion and review hospital secondary data.

Measuring the education outputs: This measurement indicator includes knowledge, skills, anxiety and depression. Evaluation tools are pre-post test questionnaires and observation forms.

3.11 Potential problems and their resolution

The following are major potential problems that could occurs and some resolution:

1. One major constraint that might occur at the beginning of the activities is the low participation by the members. Some members might not feel happy about joining group. The facilitators or team workers need to provide through instruction orientation on group regulation and group tasks. Members should participatee in determining group expectations. In this manner, the group facilitator and working committee have to play major roles in encourageing members' participation either through writing , talking or using other demonstration skills. In addition, at the beginning of each group discussion, trecreation activities are needed to create a friendly and relax atmosphere.
2. Staff workload is a possible major constraint in organizing group activities. In this manner, good preparation during the planning process might reduce time needed for implementation. In addition, the working plan i.e. monthly plan, might also help each working committee to manage their time. Related to this problem, the working committee will also mobilize hospitalmanpower or technical resources such as the hospital nutritionist, physiotherapist, or pharmacist who might be able to contribute to group.
3. The health status of pregnant women with HIV will be another potential constraint especially during the full term period, most pregnant might not be able to sit long. In addition, there may be HIV/AIDS complications such as severe cough, diarrhea,

etc., since the entire target group has a potential for opportunistic infections. Illness of some members might cause the spread of infection or create fear among other group members. The facilitator or working committee should have good screening and concern about this issue.

3.12 Ethical consideration

The issue of HIV/AIDS is complex, sensitive and concerned with various ethical problems. Basically, the major concern, particularly among those who are working with HIV, is the **confidentiality** of the clients and the legal right to accept or refuse services including health education services. In this manner, the project staff should first concern about inform consent. Before enrollment to study, pregnant women with HIV should be informed of the purpose of the study and required cooperation which includes expected roles, time frame, group structuree, group activities, expected outputs etc. Regarding the issue of confidentiality, group members should have a clear orientation or establish a clear protocol for the members to adhere to confidentiality. Group members should not be forced to divulge personal information i.e. name, working place, address until they are ready to do so. The recording system therefore will not use real names and film recording will be inhibited.

Another concern during group activities is the provision of unclear or inappropriate **education content**. Any information provided to the group will be carefully reviewed for appropriateness and accuracy. The information should not create anxiety, depression, fear, panic or misinterpretation among members. If some

members who bring-up negative experiences, facilitators should try to solve the problem i.e. provide more facts, clear up ideas or try to promote positive solution to those issues.

Another ethical concern is that emotional problems of members may aaffects communication flow and group atmosphere. It is possible that some members may prefer only listening or some may bring their emotional problem such as anger or aggression to the group. Facilitators need to establish a positive and lively atmosphere. The group relationships should be based on equality between staff and members and among the members and themselves.

3.13 Resource Requires

Group process education is formal education compared to individual or other types of education. This kind of education consume more time for organizer and hospital staff in the preparation phase but will save time in the implementation process. Group process education requires technical and logistical preparation as follows:

3.13.1 Logistic preparation: The following are some logistic preparation :

- Specific or privacy place especially in the situation that members do not want to open their HIV status.
- Schedule of activities so that members can prepare themselves for group activities.
- Education media / demonstration supplies.
- soft- drink or some gifts and materials for group activities.

3.13.2 Personal Team

The most important person in organizing group process education is the *Group facilitator*. Nopparat Rajathani Hospital, has an education expert who worked for a number of years in the education field.. A nurse counselor in the counseling unit also has expertise in-group dynamic. Both educators and nurse counselor will have major responsibilities as facilitators. ANC nurses will involved in logistic preparation and facilitators' assistants

In addition, as learning and sharing is the most essential component of group process, in some situations the project will invite the *external facilitators* i.e. people living with HIV who have succeeded in coping and adaptation, expertise in some specific issues etc. to share their experiences to group.

3.13.3 Project Budget

Items	RPF[1]	Hospital	Others	Total
I. Personnel	-	In-kind contribution	-	
1.1 1 Educator				
1.2 2 Nurses				
1.3 1 Physician				
II. Education Activities		Cash and		**31,000**
4 times per month x 9 months		In-kind		
		Contribution		
4.1 Equipment	3,000	from regular	-	
(White board, venue decoration)		budget		
4.2 Materials	10,000		-	
(Media developing)				
4.3 Outsider facilitators	8,000			
(B500-800/time x 8-10 times)	-	-		
4.4 Milk break, souvenir			10,000[2]	
III. Group Activities				**30,000**
(3-4 main activities)				
3.1 Handicraft, herbal group	10,000	-		
and other group recreation				
3.2 Delivery fund	10,000	-	10,000[3]	
IV. Administration		Cash and	-	**6,000**
		In-kind		
4.1 Advertising board	500	Contribution		
4.2 Project documentation	2,000	from regular		
4.3 Transportation and	1,500	budget		
communication				
4.4 Other logistics	2,000			
V. Monitoring and Evaluation		In-kind	-	**3,000**
		Contribution		
5.1 Mid-term review	1,000	From regular		
5.2 Final evaluation	3,000	Budget		
TOTAL	50,000	-	20,000	**70,000**

[1] Rajjadapisek Fund/ Chulalongkorn University
[2] In-kind contribution by the Milk Powder Company
[3] Cash saving from target group members

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