

## OBSTETRICS

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# Effectiveness of Group Process in Improving Knowledge, Attitude and Practice on AIDS Prevention of Pregnant Women in Ramathibodi Hospital

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## ABSTRACT

**Objective** To study the effectiveness of group process in improving knowledge, attitude and practice on AIDS prevention of pregnant women.

**Design** Quasi-experiment design.

**Setting** Department of Obstetrics and Gynaecology, Faculty of Medicine, Ramathibodi Hospital.

**Subjects** Pregnant women were selected by inclusion criteria and divided into study and control group. Each group included 36 pregnant women. Study group was taught about AIDS prevention by group process 2 times, 6 weeks apart. Control group was selected by matched pairs and conventional group lecture was given.

**Main outcome measures** Scores about knowledge, attitude and practice on AIDS prevention before and after teaching.

**Results** The characteristics of both groups were comparable and were not different. Before teaching, scores of knowledge, attitude and practice on AIDS prevention of study group were not different from control group. After teaching, scores of knowledge, attitude and practice on AIDS prevention in study group were better than before teaching, with statistically significant difference.

**Conclusion** AIDS teaching using group process was important in improving knowledge, attitude and practice on AIDS prevention of pregnant women and would be done periodically in order to prevent AIDS infection during pregnancy.

**Key words:** group process, knowledge, attitude, practice, AIDS prevention

AIDS is a communicable disease and epidemic in every groups of population, especially to mother and children which do not have risk factor for HIV infection.<sup>(1)</sup> Division of Epidemiology, Ministry of Public Health found that HIV infection in pregnant women, until March 31, 1996, was rising to 2.3 percent<sup>(2)</sup> and it caused HIV infection in infant about 20-50 percent.<sup>(1)</sup>

Antenatal clinic, Department of Obstetrics and Gynaecology, Ramathibodi Hospital began to examine HIV infection in pregnant women since January 1990 and found HIV infection in pregnant women about 0.06 percent and was rising to 0.51 percent in 1994.<sup>(3,4)</sup> The objective was to study effectiveness of group process in improving knowledge, attitude and practice on AIDS prevention of pregnant women during pregnancy.

## Materials and Methods

This was an quasi-experiment study and carried out at the Department of Obstetrics and Gynaecology, Ramathibodi Hospital from December, 1994 to March, 1995.

Seventy-two pregnant women were divided into study group and control group. Each group had 36 pregnant women. Inclusion criteria were pregnant women at 12-20 weeks' gestation at first visit and volunteer to participate in the study. Study group was selected by random sampling and were taught about AIDS prevention by group process 2 times, 6 weeks apart. Control group was selected by matched pairs to study group for socio-economic characteristics, age and education. Conventional group lecture was given to the

control group 2 times, 6 weeks apart. Both groups had to answer the same questionnaires 2 times, 12 weeks apart. The data was analysed by SPSS/PC+ using frequency, percentage, mean, standard deviation, Chi-square and t-test. Statistical significance was taken at P-value < 0.05.

## Results

Seventy-two pregnant women were divided into study group and control group. Baseline characteristics were similar between the two groups.

Before teaching, scores about knowledge, attitude and practice on AIDS prevention were fair in two groups. The scores of study group were not different from control group (Table 1).

The scores of knowledge, attitude and practice on AIDS prevention after AIDS teaching in the study group were better than before AIDS teaching, with statistically significant difference (P-value < 0.001, < 0.001, < 0.001) ; however, in the control group there were no difference (Table 2).

Comparing different mean scores of knowledge, attitude and practice on AIDS prevention before and after AIDS teaching, the study group was better than control group and there were significant difference (P-value < 0.001, < 0.001, < 0.001).

## Discussion

HIV infection is considered one of the common complications in pregnancy which is found 2-3 %.<sup>(2)</sup> Screening, identification and

**Table 1.** Comparing mean scores of knowledge, attitude and practice on AIDS prevention between study group and control group (before teaching)

	Study group (N = 36)	Control group (N = 36)	P-value
Knowledge	8.70 ± 3.49	9.50 ± 3.06	0.302
Attitude	37.78 ± 3.39	37.39 ± 3.33	0.625
Practice	39.19 ± 6.86	37.72 ± 8.39	0.418

**Table 2.** Comparing mean scores of knowledge, attitude and practice on AIDS prevention between study group and control group (before and after teaching)

	Before	After	P-value
<b>Study group (N = 36)</b>			
Knowledge	8.70 ± 3.49	12.78 ± 2.24	< 0.001
Attitude	37.78 ± 3.39	40.53 ± 2.89	< 0.001
Practice	39.19 ± 6.86	45.39 ± 6.46	< 0.001
<b>Control group (N = 36)</b>			
Knowledge	9.50 ± 3.06	10.00 ± 2.29	0.083
Attitude	37.39 ± 3.33	37.03 ± 4.58	0.484
Practice	37.72 ± 8.39	37.89 ± 8.49	0.781

counselling are important components of prenatal care for women at risk of HIV infection because of no definitive treatment.

The instruction can be divided into individual instruction and group instruction. The individual instruction emphasizes on giving to learner one by one but it takes more time and cost than the group instruction. The group instruction can be divided into several methods, this study included lecture and group process. The lecture is given knowledge to learners more than 20 persons, the instructor can not evaluate

every learner and some learners may be bored or no question because of large learner group. The group process is given knowledge by instructor to learners and learners to learners approximately 8-10 persons per group. And also the group process will introduce about concept and practice to learners.

Quasi-experiment design was suitable in this study because sample group was divided into study group and control group. The factors which influence in improving knowledge, attitude, and practice on AIDS prevention were controlled.



In this study baseline characteristics were similar between the two groups for age, education, income, occupation, experience for STD, perception of news, and scores of knowledge, attitude and practice on AIDS prevention before AIDS teaching. The study group was taught about AIDS prevention by group process and scores for knowledge, attitude and practice on AIDS prevention were better than before AIDS teaching and were better than control group with statistically significant difference.

Marram and Steel<sup>(5,6)</sup> showed that AIDS teaching by group process was conclusive to good relationship, friendly, and learning to solve the problem and select practice for themselves. Fabiyi<sup>(7)</sup> found that knowledge development was inclusive to practice development. Other study by Suwan<sup>(8)</sup> found that improving knowledge will change the attitude. The process of change was by adoption process.<sup>(9)</sup> Kegeles<sup>(10)</sup> observed that after AIDS teaching, sexually active adolescents had improved knowledge, attitude and took to using condom. In conclusion, the AIDS teaching by group process had significant influence in improving knowledge, attitude and practice on AIDS prevention of pregnant women more than group lecture and should be done periodically.

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