AIDS Education and Intervention Trials among Youths in Factories: A Pilot Project

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Abstract

The project aimed to conduct a pilot study and intervention trials among youths in a factory of Khon Kaen. After contacting and obtaining agreement from owners/managers of factories, a survey using a self administered questionnaire, in-depth interview and focus group with workers to determine their level of knowledge and awareness of AIDS and high risk behaviour. A series of in-depth interviews with 16 workers and group discussion with 8 groups were conducted to find out their possible motivation for prevention and their acceptance of interventions/media. The data was used as a baseline for evaluating change after interventions and to modify the intervention education strategies and content. The study showed that the groups of factory workers which were not involved in the AIDS prevention had a different level of knowledge, attitudes, and behavior related to AIDS prevention than the groups which received the intervention and the methods used in the intervention achieved a level of success. The information we collected also showed that the best kinds of media for this purpose were videos and informational cartoons, which were also of special interest to the study group. It is hoped that the models will be adopted by relevant government and non-government agencies to be used in factories throughout the country.

The first case of AIDS was reported in Thailand in 1984(1). Since then the AIDS virus has been spreading rapidly among male drug users, and at the present time the epidemic appears to be driven primarily by patterns of heterosexual behavior. Recent surveys of sexual behavior showed that most Thai men visit commercial sex workers and that unprotected intercourse with commercial sex workers is widespread(2). Transmission of HIV is then from men to families, and it has made a high incidence of HIV infection among pregnant women and infants. It is estimated that each

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year a large number of newborn born from HIV infected mothers acquire HIV infection and will die in early life while the others will very likely be orphaned. This will have a wide impact on the medical, psycho-social and economic situation and will lead to a great social burden.

Although AIDS cases have been reported in every part of Thailand the highest incidence continues to be in large metropolitan areas. Khon Kaen is the highest HIV prevalence of Northeastern Thailand, and has much in common with other provincial capitals elsewhere, especially regarding the widespread availability of commercial sex workers. Men who live within a municipal area have probably more opportunities for sexual contact outside of marriage. AIDS has been ranked as the first priority of health problems in the city of Khon Kaen.

In Khon Kaen since the first case of AIDS patient was reported in 1986, cumulative AIDS cases in December, 1996 were 1360, of these 232 cases have died, and symptomatic HIV are 503, of these 36 cases have died(3). Pattern of pandemic and predominant routes of HIV infection in Khon Kaen is similar to that of the nation.

Although several strategies for solving this crisis have been identified by government and non government sectors, the number of men and women who are HIV positive continue to increase every year. Perhaps these strategies fail because they were developed only from the professional's perspective but not from that of the vulnerable population. Moreover, Thailand has experienced rapid development in the industrial sector. This has caused the total number of people involved in industry to increase significantly(4). With this increase, however, labourers have not only become an important group in regard to the development of the country but also important in regard to public health. In 1992, of the total number of people infected with HIV, 24 per cent were labourers and 61 per cent were between the ages of 15-24(5). In 10-15 years, approximately one million labourers could lose their lives to AIDS(6). Even though living and working together with others may or may not be a factor in the spread of HIV/AIDS, when someone is infected, factory administrators, managers and employees need to have the correct information on the transmission and prevention of the disease. They also need to develop correct attitudes about the disease so that they may live and work together with people with HIV/AIDS without prejudice.

Therefore, there is a strong need to provide education and intervention on HIV/AIDS to these workers , yet models of education and intervention for factory workers are still lacking. So the team sought to develop and test education-and-intervention models suitable for youths in such settings who are at risk of HIV infection. The objective of this study was

1. To provide knowledge on AIDS and motivate attitude-change and preventive behaviors.
2. To conduct rapid research and to design models for education and intervention among young factory workers.
3. To pilot a study and intervention trials to recommend for expansion throughout the country.

Methodology

The duration of the project was 12 months and the project site was two factories in Khon Kaen Province. The target population was approximately 2,000 persons. Cooperation of the factory owners was obtained in advance.

The study group was divided into two groups, the sample in the first factory (Deja Panich Fishing Net Factory) as the trial group and that in the second factory (Khon Kaen Hare Oun Fishing Net Factory) as the control group. A survey using a self administered questionnaire with 500 workers in the trial group and 50 workers in the control group to determine their level of knowledge and awareness of AIDS and high risk behavior, before and after the AIDS intervention trial. A series of in-depth interviews with 16 workers and discussions with 8 other groups were conducted to find out their possible motivation for prevention and their acceptance of intervention. The data were used as a baseline for evaluating change after the interventions. The results of the pretest were then used as the basis for designing intervention and education strategies and content.

During the implementation stage, a trial of the model was first conducted in the second factory. Evaluation results were used to modify the intervention strategy. The second implementation trial was conducted and evaluated in the first factory. Dissemination and transfer of the models was then accomplished through a one-day meeting, publications and involvement of personnel from

selected government and non-government agencies in conducting the training in factories throughout the country.

RESULTS

The completed questionaires of the trial group consisted of 305 respondents in the Pre-test, and 288 respondents in the Post-test, and sample of the control group consisted of 21 respondents in the Pre-test and 19 respondents in the Post-test. When data collection was completed, data analysis was undertaken which gave the following results:

Sixty five per cent of the sample group were under the age of 24, 65 per cent had a 6th grade education or lower, 63 per cent of them were single. Most of them (98 per cent) were labourers and 81 per cent lived at home (See Table 1)

Table 2 shows factory workers' knowledge about AIDS. Before the intervention, 26 per cent believe that AIDS prevention and control is possible to achieve by having sex only with people who dress well and look clean. 66 per cent believe that AIDS can be prevented by using a condom every time you have sex. Fourty seven per cent did not believe that taking antibiotics to prevent it every time before having sex would prevent AIDS and 73 per cent believe that AIDS can be prevented by not having sex with prostitutes. After the intervention only 10 per cent, 85 per cent, 56 per cent, 81 per cent believe those repectively. The intervention had some statistically significant effects on mistaken believes about methods of transmission for AIDS.

Table 3 provides the results of factory workers' attitude about AIDS. Before the intervention 28 per cent disagreed with the statement that if they had HIV/AIDS they would not be able to live in society (discrimination attitude), after the intervention 48 per cent disagreed with this statement. However, before the intervention 69 per cent believed that having sex one time could give you AIDS, after the intervention 76 per cent believed this. Moreover, forty nine per cent answered 'No' to the question if their coworkers get AIDS, will they stop being friends with those persons before intervention compared to 73 per cent who answered 'No' after intervention.

AIDS-related behavior is shown in Table 4. The intervention appears to have had statistically significant effects on certain kinds of high risk behaviors, such as drinking alcohol, taking drugs intravenously, taking amphetamines and having extramarital or premarital sex without using a condom

We collected comments from the participants about media that should be used to give AIDS information in factories and they said they liked to read cartoons without too much writing. They liked posters if they have cartoon pictures because they are fun to look at and it's easy to read them. They would like to make a calendar to keep for a long time. Moreover, they said they liked radio and television but it's difficult to listen or watch while working, As for lectures they liked to have people come and talk and show photographs or videos, too. They responded that they liked to read brochures because they can read them anytime.

After the intervention more participants were aware of AIDS education medias and had a positive attitude about the use of video, cartoons and calendars. (See Table 6)

The overall intervention program seems to have had a statistically significant effect on the knowledge, attitude and behavior of the participants. (See Table 7)

Table 1. Social and economic background of factory workers.

Variable	N	%
Age (years)		
20-24	92	30.2
20-24	108	35.4
25-29	53	17.4
≥ 30	52	17.0
Total	305	100
Education level		
Graduated 4th grade	58	19.0
Graduated 6th grade	142	46.6
Graduated 9th grade	42	13.8
Graduated 12th grade	58	19.0
Assoc. degrees	4	1.3
Didn't answer	1	0.3
Marital status		
Single	193	63.3
Married	100	32.8
Divorced	12	3.9
Position		
Labourer	299	98.0
Head of section/supervisor	6	2.0
Current housing arrangements		
Own house	248	81.3
Factory housing	14	4.6
Rent housing outside factory	37	12.1
Stay with relatives	6	2.0

Table 2. Factory workers' knowledge about AIDS.

Knowledge about AIDS	Before intervention N	Before intervention %	After intervention N	After intervention %	P-value
1. AIDS prevention and control is possible to achieve by					
1.1 Having sex only with people who dress well and look clean					<0.001
Yes	79	25.9	29	10.1	
No	133	43.6	166	57.6	
Didn't know/Didn't answer	93	30.5	93	32.3	
1.2 Using a condom every time you have sex.					<0.001
Yes	202	66.2	244	84.7	
No	45	14.8	15	5.2	
Didn't know/Didn't answer	58	19.0	29	10.1	
1.3 Taking antibiotics to prevent it every time before having sex					=0.03
Yes	30	9.8	32	11.1	
No	143	46.9	162	56.3	
Didn't know/Didn't answer	132	43.3	94	32.6	
1.4 Don't have sex with prostitutes					=0.03
Yes	224	73.4	233	80.9	
No	23	7.5	13	4.5	
Didn't know/Didn't answer	58	19.1	42	14.6	
2. What methods of transmission are there for AIDS*					
Eating food together	9	2.6	5	1.8	= 0.08
Sharing a bathroom	48	13.9	2	0.7	<0.001
Sharing a bedroom	28	8.1	8	2.7	<0.001
From mother to child	252	82.6	269	93.4	<0.001
Didn't answer	9	2.6	4	1.4	

*Number may not equal 305 due to rounding.

Table 3. Factory workers' attitude about AIDS.

Attitude about AIDS	Before intervention N	Before intervention %	After intervention N	After intervention %	P-value
1. Do you think that if you have AIDS you will not be able to live in society					<0.001
Yes	142	46.6	88	30.6	
No	86	28.2	138	47.9	
Didn't know/Didn't answer	77	25.2	62	21.5	
2. Do you think that having sex one time could give you AIDS					= 0.05
Yes	209	68.5	220	76.4	
No	22	7.2	21	7.3	
Didn't know/Didn't answer	74	24.3	47	16.3	
3. If your coworkers gets AIDS, will you stop being friends with that person					<0.001
Yes	97	31.8	45	15.6	
No	150	49.2	211	73.3	
Didn't know/Didn't answer	58	19.0	32	11.1	

Table 4. AIDS-related behavior.

AIDS-related behavior	Before intervention N	%	After intervention N	%	P-value
Do you have the following behavior					
- Drink alcohol until you pass out	52	17.0	18	6.3	<0.001
- Take drugs intravenously	2	0.7	6	2.1	<0.001
- Take amphetamines	8	2.6	2	0.7	<0.001
- Have extramarital or premarital sex without using a condom	21	6.9	11	3.8	<0.001
- None of the above	222	72.8	251	87.1	
Total	305	100	288	100	

Table 5. Comments from indepth interview and focus group (before intervention) about media that should be used to give AIDS information in factories.

1. Cartoons	- Like to read cartoons without too much writing
2. Posters	- If they have cartoon pictures, they are fun to look at
	- There is enough time to read them.
	- Would like to make a calendar to keep for a long time.
3. Radio and television	- Hard to listen to or watch while working
4. Lectures	- Like to have people come and talk and show some photographs or videos, too
5. Brochures	- Like to read.
	- You can read them anytime.

Table 6. Shows totals and percentages of respondents who expect to be able to learn about AIDS most effectively from the media.

Type of media	Before intervention N	%	After intervention N	%
Calendar	0	0.0	44	9.5
Cartoon	0	0.0	70	15.2
Brochure	23	5.8	20	4.3
Video	234	59.5	288	62.3
Other	136	34.7	40	8.7
Total	393	100*	400	100*

*Number may not equal 305 and 288 due to rounding.

Table 7. Scores before and after intervention.

Score	Mean	S.D.
Before intervention	8.5262	1.314
After intervention	9.5262	0.612

t-test = 3.49; p-value = 0.003

SUMMARY

The project aimed to conduct a pilot study and intervention trials among young workers in a factory in Khon Kaen. The team sought to develop and test education and intervention models suitable for youth in such settings who are at risk of HIV infection.

The survey was conducted by using questionaires, in-depth interviews and focus groups to determine their level of knowledge, attitudes and awareness of AIDS and high-risk behavior. A control group (from another factory) which did not receive the intervention was studied as well. Data was analysed by computer employing the SPSS programme including analysis of social and economic background, factory worker's knowledge, attitude and AIDS related behavior before and after the intervention using a combination of media including videos, cartoons, calendars and brochures. The result showed that most of the people in groups which received the intervention had better knowledge, attitudes and behavior related to AIDS-prevention than groups which had not yet received the intervention. This shows that the methods used in the intervention achieved a level of success. The information we collected also showed that the best kinds of media for this purpose were videos and informational cartoons, which were also of special interest to the study group.

Dissemination activities included a one-day meeting for 50 factory owners and managers. Intervention models were introduced and provided. At least 3 interventions (videos, cartoons and calendars) were reproduced by both GOs and NGOs for expansion throughout the country as well.

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การให้ความรู้เพื่อการป้องกันโรคเอดส์แก่วัยรุ่นและหนุ่มสาวในโรงงาน : โครงการนำร่อง

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โครงการวิจัยเรื่อง "การให้ความรู้เพื่อการป้องกันโรคเอดส์แก่วัยรุ่นและหนุ่มสาวในโรงงาน : โครงการนำร่อง" เป็นโครงการวิจัยเพื่อหารูปแบบและสื่อที่เหมาะสมในการรณรงค์ป้องกันโรคเอดส์โดยใช้ข้อมูลที่ได้จากการศึกษาวิจัยเชิงปริมาณและการวิจัยเชิงคุณภาพ จากประชากรเป้าหมาย มาสร้างรูปแบบ และจัดทำสื่อแล้วนำไปทดลองใช้กับประชากรตัวอย่างในกลุ่มทดลอง ประเมินผลด้วยการวัดระดับความรู้ ทัศนคติ และแนวคิดในการป้องกันพฤติกรรมเสี่ยงต่อการติดเชื้อ ด้วยแบบสอบถามชุดเดิม การสัมภาษณ์แนวลึก และการจัดกลุ่มซักถาม เปรียบเทียบระหว่างก่อนและหลังการรณรงค์ฯ ในกลุ่มเดียวกันและเปรียบเทียบกับกลุ่มควบคุม ใช้ระยะเวลาในการศึกษาวิจัย 1 ปี โดยใช้โรงงานที่มีคนงานมากกว่าหนึ่งพันคน 2 แห่ง ในจังหวัดขอนแก่น

ผลการวิจัยพบว่า ระหว่างกลุ่มคนงานที่ยังไม่ได้เข้าโครงการรณรงค์เพื่อให้ความรู้ในการป้องกันโรคเอดส์กับกลุ่มคนงานที่ผ่านโครงการรณรงค์ฯแล้ว มีความรู้ ทัศนคติ และการปฏิบัติตนเกี่ยวกับการป้องกันโรคเอดส์แตกต่างกัน กล่าวคือ กลุ่มคนงานที่ผ่านโครงการรณรงค์ฯ ส่วนใหญ่มีความรู้ ทัศนคติ และการปฏิบัติตนเกี่ยวกับการป้องกันโรคเอดส์ดีกว่ากลุ่มคนงานที่ยังไม่ได้ผ่านโครงการรณรงค์ฯ แสดงให้เห็นว่าการรณรงค์ป้องกันโรคเอดส์ในกลุ่มคนงานด้วยวิธีการผ่านสื่อประสบผลสำเร็จในระดับหนึ่ง นอกจากนี้ข้อมูลยังชี้ให้เห็นว่าสื่อที่ใช้สำหรับการรณรงค์ที่ดีที่สุดคือ เทปโทรทัศน์ และการนำเสนอข้อมูลในรูปแบบหนังสือการ์ตูนก็เป็นสื่อที่มีผู้สนใจมากอีกอย่างหนึ่ง และผู้วิจัยเสนอแนะให้นำรูปแบบและสื่อที่ผลิตขึ้นจากโครงการนี้ไปใช้กับประชากรในโรงงานอื่นทั่วภูมิภาคตะวันออกเฉียงเหนือ และทั่วประเทศ เพื่อลดปัญหาการแพร่โรคเอดส์ การอยู่ร่วมกับผู้ติดเชื้อโดยไม่รังเกียจในกลุ่มวัยรุ่นและหนุ่มสาวในโรงงาน

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