

**Thesis Title** The Effectiveness of Health Education Program on  
Agriculturists' Behavior in Using Pesticide in  
Sampran District, Nakornpathom Province.

**Name** Klinchun Keawcharoen

**Degree** Master of Science in Public Health  
(Health Education)

**Thesis Supervisory Committee**  
Somjit Supannatas, M.P.H., Dr.P.H.  
Vason Silpasuwan, M.P.H., Dr.P.H.  
Rongrote Poomriew, M.P.H., Ph.D.

**Date of Graduation** 23 April B.E.2533 (1990)

#### ABSTRACT

At present, the growth in the agricultural sector is advancing at high pace. The incident rate of using pesticide tends to increase, because most of the agriculturists neither realize the danger from chemical substances containing in the pesticide nor follow the instruction for the users. Moreover they are not aware of the danger of pesticide using. Consequently, the hazard not only effect on the users, but also to the others who reside in the surrounding areas as well as the consumers. The problems of using pesticide inspires the researcher to conduct this research.

This research aimed to study the effectiveness of health education program on agriculturists' behavior in using pesticide in Sampran district, Nakornpathom province. It is a Quasi-experiment research. The health education program consisted of a series of lectures learning media namely: Videotape, poster, leaflet, community leader acted as a model, and village broadcasting system.

**Thesis Title** The Effectiveness of Health Education Program on  
Agriculturists' Behavior in Using Pesticide in  
Sampran District, Nakornpathom Province.

**Name** Klinchun Keawcharoen

**Degree** The Master of Science in Public Health and general  
characteristic of (Health Education) - the experimental group.

**Thesis Supervisory Committee** Advisor: recording check list, invented by  
Somjit Supannatas, M.P.H., Dr.P.H.  
Vason Silpasuwan, M.P.H., Dr.P.H.  
Rongrote Poomriew, M.P.H., Ph.D.

**Date of Graduation** 23 April B.E.2533 (1990)

#### ABSTRACT

At present, the growth in the agricultural sector is advancing at high pace. The incident rate of using pesticide tends to increase, because most of the agriculturists neither realize the danger from chemical substances containing in the pesticide nor follow the instruction for the users. Moreover they are not aware of the danger of pesticide using. Consequently, the hazard not only effect on the users, but also to the others who reside in the surrounding areas as well as the consumers. The problems of using pesticide inspires the researcher to conduct this research.

This research aimed to study the effectiveness of health education program on agriculturists' behavior in using pesticide in Sampran district, Nakornpathom province. It is a Quasi-experiment research. The health education program consisted of a series of lectures learning media namely: Video tape, poster, leaflet, community leader acted as a model, and village broadcasting system.

Samples was agriculturists in Sampran district. They were divided into two groups. The experimental group came from Bangchang subdistrict. Their were 44 male and 20 female altogether 64. Their ages were ranged from 15-65 years. The control group came from Klong Jinda subdistrict. The member of control group sample was 64 and general characteristic of the sample were alike the experimental group.

Questionnaires and behavior recording check list, invented by the researchers were the tools of collecting data. Information collected from the sample covered the knowledge, attitude and practice of using pesticide. Data were collected by the researcher and 4 assistant researchers before and after experiments operated. Behavior recording check-list, done by sample was collected 5 weeks after the experiment.

Data were analyzed and presented as percentage, arithmetic means, standard deviation. Pairs t-test and t-test were used as statistics for testing of differences. Chi-Square test and Pearson Product Moment Correlation test were utilized for testing relationship of variables. Level of confidence was set at 95.

The main results were as follows:

- 1). After experiments, the average score of knowledge of the experimental group in using pesticide was higher than prior to experiment. The difference was statistical significant ( $p < 0.001$ ).
- 2). After experiments, the average score of attitude of the experimental group in using pesticide was higher than prior to experiment. The difference was statistical significant ( $p < 0.001$ ).
- 3). After experiments, the average score of practice of the experimental group in using pesticide was higher than prior to experiment. The difference was statistical significant ( $p < 0.01$ ).

- 4). After experiments, the average score of knowledge of the experimental group in using pesticide was higher than the control group. The difference was statistical significant ( $p < 0.001$ ).
- 5). After experiments, the average score of attitude of the experimental group in using pesticide was higher than the control group. The difference was statistical significant ( $p < 0.001$ ).
- 6). After experiments, the average score of practice of the experimental group in using pesticide was higher than the control group. The difference was statistical significant ( $p < 0.001$ ).
- 7). Socio-demographic variables namely: age, sex, educational level, and lenght of time in using pesticide had no relationship with practicing upon health education program.
- 8). After the agriculturists' had been adviced from public health personal and agriculture leaders as modeling, the score of practice, knowledge and attitude were higher than prior to experiment. The relationship between practice and knowledge was highly correlated  $r = 0.373$  ( $p < 0.01$ ). Further more the relationship was found between practice and attitude  $r = 0.448$  ( $p < 0.001$ ).

From this research findings, the researcher would like to recommend that health education program providing for the agriculturists, who have to use pesticide, should consist of lecturing by physician, then follow by using video tape, posters, leaflets, community leader as modeling, and village broadcasting system.