

CHAPTER IV

DATA EXERCISE

4.1 – Introduction

The SHI scheme has been implemented in Vietnam for 5 years and has gained initial encouraging achievement. To the end of 1999, there were more than 3 million school pupils and university students participating in the SHI scheme, covering around 20% of total pupils and students of the whole country. SHI has contributed its part for ensuring the quality of primary health care activities for pupils and students at the schools via the development of a school health care network. SHI has supported programs of drug addict control, HIV/AIDs prevention, tobacco control, environmental hygiene and safe water supply in the schools. SHI has provided first aid for sudden illness and accidents at the schools, carried out routine medical examinations and check ups for school pupils and students to detect and prevent serious diseases at an early stage. There were pupils who have been paid several ten millions Dong for his or her one treatment course. Specially, there was one pupil who has been paid more than 200 million Vietnam Dong for his hospital expenditure (Le Ngoc Trong, 2000).

Beside the achievement of VHI implementation in the last 5 years, VHI is also facing some problems and challenges in which the low coverage rate in the SHI

scheme is the main problem. The coverage rate should be 40 – 50% of the eligible population to ensure sufficient subsidy for illness. But, the coverage rate of SHI nowadays is 20% of the eligible population; in some provinces the coverage rate has been up to more than 50% of the eligible population such as Ho Chi Minh city, Thua Thien Hue, Da Nang and Ninh Thuan province. Meanwhile, a number of other places just covered under 10% of eligible population. And Ba Vi district of Ha Tay province is one of these places.

Based on the data available in Ba Vi District Health Insurance Sub-Branch (HISB, in the school-year 2000-2001 the whole Ba Vi district has 76 schools with total 57,207 schoolchildren. Of the 76 schools, there are 34 primary schools, 36 lower secondary schools, 5 upper secondary schools and 1 secondary technical school. There are just 7 schools with a total of 1,603 enrollees that have participated in the SHI scheme. The coverage rate is 2.8%. Why the coverage rate in SHI scheme in Ba Vi district is so low in comparison with the average rate of the whole country is the concern of all related divisions. What are the possible factors related to SHI participation of schoolchildrens's parents in Ba Vi district is a question for the researchers to study.

4.2 – Objectives

- + To test data collection techniques.
- + To identify the specific factors related to SHI participation of local schoolchildren's parents and possible solutions for the concerned authorities and HI

officers to take into consideration in expanding SHI coverage in Ba Vi district in coming years.

4.3 – Data collection methods

4.3.1 – Methodology:

Case – control study is applied to identify the possible factors related to SHI participation of schoolchildren's' parents. A group of schoolchildren's' parents who have bought SHI cards for their children in school-year 2000 – 2001 will be identified (*called case*) and, for purposes of comparison, a group of schoolchildren's' parents who have not purchased cards will be selected (*called control*).

4.3.2 – Technique for data collection:

- Survey (*to test the data collection technique, identify some factors related to participation of schoolchildren's' parent in the SHI scheme*).

- In-depth Interview with key informants (*to test technique and to identify some underlying causes leading to low coverage rate of SHI scheme in Ba Vi district*).

4.3.3 – Instrument for data collection:

A set of questionnaires has been used to collect the information from schoolchildren's' parents including both those who have bought SHI cards and those

who have not yet purchased cards (Please, kindly see attachment from page 137 to 144). In addition, a guideline for in for an In-depth Interview was developed to collect information from key informants including head of 'Schoolchildren's Parent's Association', the head of the 'Communal Secondary School', the head teacher of one class of the school, a member of the Directors Board of District Health Center and a member of Leaders Board of Ba Vi district Health Insurance Sub-Branch (kindly see attachment from page 145 to 159).

4.3.4 – Study location:

The study location that has been chosen is Dong Thai commune – one of 32 communes of Ba Vi district, Ha Tay province. Dong Thai has an area of 812 ha, of which the agriculture area is 583 ha. Currently, the commune has population of 10,167 inhabitants of which males are 4,916 persons (48.4%) and females are 5,251 persons (51.6%). Dong Thai is one of the 22 agricultural communes of Ba Vi district. The economic pattern of the commune mainly is agriculture with an average income of 350-kg rice per year per person. The literacy rate of the commune is over 90%.

Dong Thai has one primary school with 1,230 pupils and one lower secondary school with 879 pupils. The commune has 63 children attending upper secondary school, 21 students attending training courses in different high school and technical secondary schools and 14 students attending training courses in the different universities. There is no health professional working in either the primary or secondary schools of the commune yet. School health insurance just started in the

lower secondary school of the commune in the school year 2000-2001 with the participation of only 91 pupils (10.35% of total number of pupils of communal lower secondary school or 4.1% of the eligible group).

In general, Dong Thai is similar to most other communes in the district in term of economic pattern. And Dong Thai is one of two primary and lower secondary schools in the 22 agricultural commune, which have started implementation of SHI scheme. But the participation rate is still low (4.1%); therefore, Dong Thai has been chosen for the researcher to study.

4.3.5 – Sample size and sampling:

- Sample size:

+ Due to constraints of time and other necessary resources, a group of at least 30 schoolchildren's parents who have bought SHI cards for their children should be identified as the case group. With the aim of comparison to determine the factors and causes that may lead to SCP not buying SHI cards, the study sample should include subject who are not enrolled – a control group with the similar number, therefore the total sample size would be about 60. For in-depth interview there would be five to six key informants including Head of Schoolchildren's Parent's Association, head of the Communal Lower Secondary School, head teacher of one class of the school, a member of Directors Board of the DHC and one member of the Ba Vi District HISB.

- **Sampling:**

The technique used for sampling with the case group is simple random, and stratified random sampling was applied to the control group.

4.3.6 – Pre-field activities:

- A set of questionnaires for survey and a guideline for in depth interview has been prepared from December 2000 to January 2001 by the researcher with the comments and support of the experts from both in and out of the College of Public Health, Chulalongkorn University. The questionnaire and guideline was also submitted to the Adviser of the researcher for advice before the researcher returned to Vietnam for data collection.

- After coming back to Vietnam, the researcher contacted with the directors board of the Ba Vi District Health Center to look for some basic information on health services in the district and to request support and collaboration during the time the researcher was studying in Ba Vi district. The directors' board of the district health center was very kind and willing to support the researcher. On 31 January 2001, Ba Vi District Health Center sent letter No. 12 / KHNV to introduce the researcher to the Dong Thai Communal People Committee, the chief of the communal health post, the head teachers of communal lower secondary school, and to set the time to work with them. They also appointed four interviewers who were working in the field lab to support the researcher in carrying out survey.

- Due to the limited time, during the weekly meeting of the interviewers, the researcher met four interviewers who had been appointed by the Director of Ba Vi District Health Center to explain the structure of the questionnaire and manner of interview.

- The questionnaire was copied into 80 sets and distributed for the interviewers; other necessary stationary and facilities such as note sheets, recorder, tape, batteries for in depth interviews were also prepared.

4.3.7 – Data collection and analysis:

- Collection: The survey was conducted by four interviewers under supervision of the researcher from February 8 – 13, 2001. An in-depth interview was done by the researcher in collaboration with the Deputy Director of Ba Vi District Health Center.

- Analysis: Completed questionnaires were checked by the researcher. The checked questionnaires were coded before entering data into a computer. The Statistical Package for Social Science (SPSS) software for Windows was used as an instrument for entry data and analysis. The data were divided and analyzed appropriately according to each factor in the study.

4.4 – Findings

There were a total of 69 subjects involved in the study. The subjects were divided into two groups, in which the case group included 33 subjects and the control group was 36 subjects. The findings were collected according to the factors that may affect the participation of SCP in the SHI scheme. The following are findings from the study:

4.4.1– General information on schoolchildren’s parents:

The figures on the following Table 10 shows that the ratio of males in case group was slight higher than in the control group. But, the association between gender and SHI participation is not significantly different.

Table 10: General Information on schoolchildren’s parents:

Gender	Case		Control	
	n	%	n	%
- Male	15	45.5	14	38.9
- Female	18	54.5	22	61.1
- Total	33	100.0	36	100.0

It can be seen that the ages of SCP are mostly in the range of 33 to 50: more than 75% in both groups; and those above 60 to the oldest 68 represent less than 5%. With this range of ages, the SCP has a high ability to receive SHI information.

Table 11: The ages of schoolchildren's parents

Age group	Case		Control	
	n	%	n	%
+ 33 – 40	11	33.3	13	36.1
+ 41 – 50	14	42.4	16	44.4
+ 51 – 60	7	21.2	5	13.9
+ 61 – 68	1	3.0	2	5.6
Total	33	99.9	36	100.0

In terms of the relationship between the subjects and the schoolchildren, more than 94% in both case and control groups is the father or mother. The details are shown in the following Table 12.

Table 12: The relationship between the subjects and the schoolchildren

Relationship	Case		Control	
	n	%	n	%
+ Fathers	16	48.5	13	36.1
+ Mother	16	48.5	21	58.3
+ Grandfathers or mothers	1	3.0	2	5.6
Total	33	100.0	36	100.0

The number of children in school from each family is one of the concerns, in terms of the economic aspect, of the VHI managers. The finding from this study showed that regarding the number of children in school from each family (subject) there is not significant difference in association with SHI participation.

Table 13: Number of children in school from each family

Relationship	Case		Control	
	n	%	n	%
+ 1 child	11	33.3	12	33.3
+ 2 children	12	36.4	11	30.6
+ 3 – 4 children	10	30.3	13	36.1
Total	33	100.0	36	100.0

Of the case and control subjects, there is a bit difference in occupation, but the difference is not significant in association between occupation and SHI participation.

The finding is as follows:

Table 14: The occupation of schoolchildren's parents

Occupation	Case		Control	
	n	%	n	%
+ Retired or elderly	3	9.1		
+ Farmer	29	87.9	36	100.0
+ Business / Small trade	1	3.0		
Total	33	100.0	36	100.0

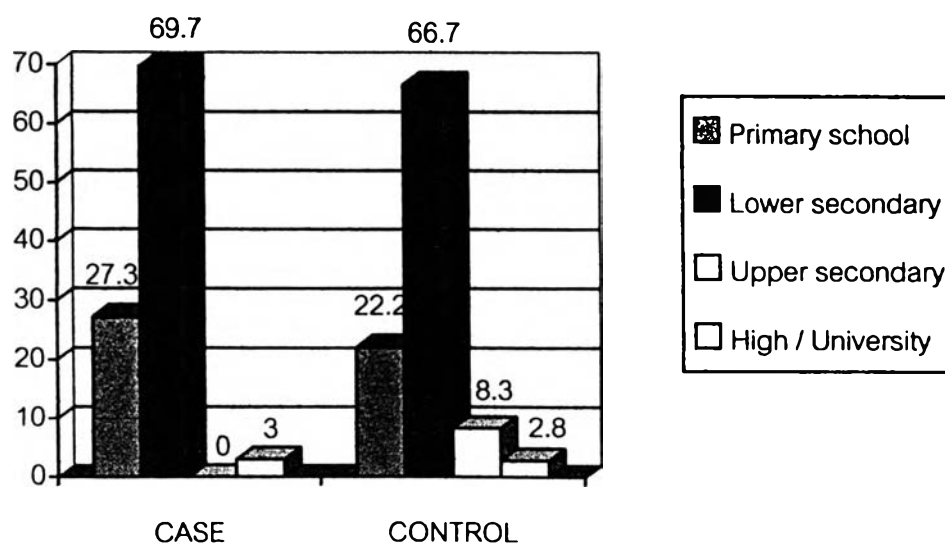
Education level normally is related to the involvement of people in a social policy, but the difference in education from the finding of the study is not significant.

The detail of education in both case and control group is in the following Table 15:

Table 15: The education level of schoolchildren's parent

Education level	Case		Control	
	n	%	n	%
+ Primary school	9	27.3	8	22.2
+ Lower secondary school	23	69.7	24	66.7
+ Upper secondary school			3	8.3
+ High school / University	1	3.0	1	2.8
Total	33	100.0	36	100.0

Chart 5: Education level of schoolchildren's parents



4.4.2 – The findings on the economic status of schoolchildren's parents:

Regarding the current economic status of the people living in the countryside of Vietnam, economics is an issue that concerned the researcher.

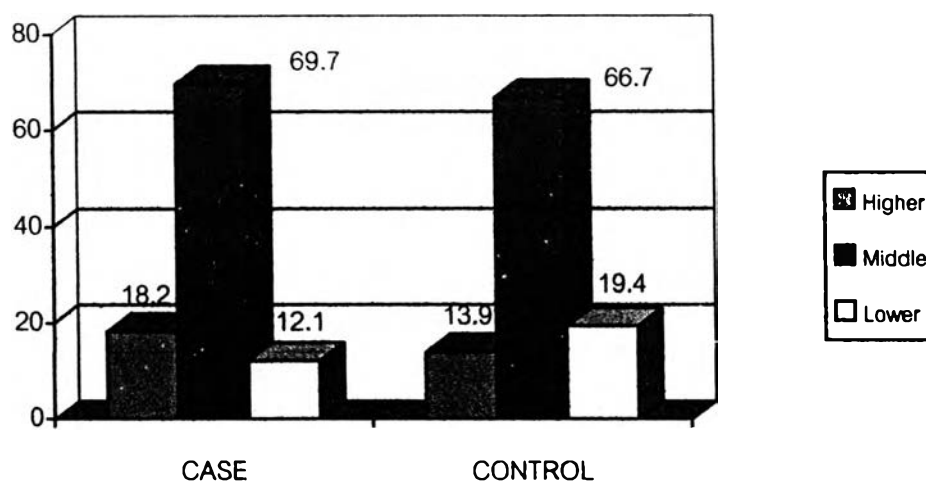
Previous study on health insurance schemes for people outside formal sector employment stated that several schemes that had examined the issue of affordability acknowledged that it could be a problem. For moderate to large, lower-income households in Nkoranza district, Ghana, the estimated cost of premiums amounted to 5-10% of the annual household budget, which may well be a financial barrier to membership (Somkang et al., 1994). In Muyinga, Burundi, 27% of the respondents of a household survey stated that financial inability to purchase a card was one of the main reasons for not participating in the scheme (Arhin, 1994).

In this survey, the indicator on general economic status was self-evaluated by the subjects in comparison with other families in the same commune. To have the whole picture of the subject, one needs not only the economic status by self-evaluation, but also information on the housing and valuable assets that are available; this information was also collected. The finding shows that there is not significant difference in association between economic status and SHI participation. The following are findings from the study.

Table 16: Economic status of schoolchildren's parents

Economic status	Case		Control	
	N	%	N	%
- General economic status:				
+ Higher than others	6	18.2	5	13.9
+ Middle level	23	69.7	24	66.7
+ Lower than others	4	12.1	7	19.4
Total	33	100.0	36	100.0
- Housing:				
+ Brick, zinc roof	27	81.8	28	77.8
+ One floor / beton roof	2	6.1	6	16.7
+ two / more than two floors	4	12.1	2	5.5
Total	33	100.0	36	100.0
- Value assets of the family:				
+ Motorbike:	6	18.2	6	16.7
+ Color TV	21	63.6	15	41.7
+ Video cassette	8	24.2	5	13.9
+ Refrigerator	1	3.0	1	2.8
+ Telephone	0	0	0	0
+ Cabinet / salon	20	60.6	19	52.8

Chart 6: Economic status of schoolchildren's parents



The information the researcher obtained from Mr. Phung Quoc Dinh, the head of the communal SCPA by in-depth interview corresponded with the findings from the survey. He stated that:

“With the premium of 12 to 15 thousand Dong per year, it doesn’t matter with our relatives (*the way of calling all people in the community*) nowadays. We know that it is not enough to pay for going once to see a doctor if our child got sick, but the matter is point of time...”.

The point of time that the head of the communal SCPA mentioned in his response would be understood that if the SHI cards are sold once a year at the beginning of the school year, SCP might have financial difficulty. The following is finding from the survey.

Table 17: The financial difficulty at the beginning of the school year

The answer	Case		Control	
	N	%	n	%
+ Not difficult	11	33.3	18	50.0
+ Not so difficult	17	51.5	12	33.3
+ Difficult	5	15.2	6	16.7
Total	33	100.0	36	100.0

In fact, Vietnam nowadays still has approximately 18% population who is categorized as poor, the finding in Table 17 above is reasonable.

4.4.3 – The findings on SHI information:

The percentage of the SCP who have heard about SHI information is as follow:

Table 18: The number of people hearing about SHI

Hearing about SHI	Case		Control	
	N	%	n	%
+ Yes	33	100.0	21	58.3
+ Not yet			15	41.7
Total	33	100.0	36	100.0

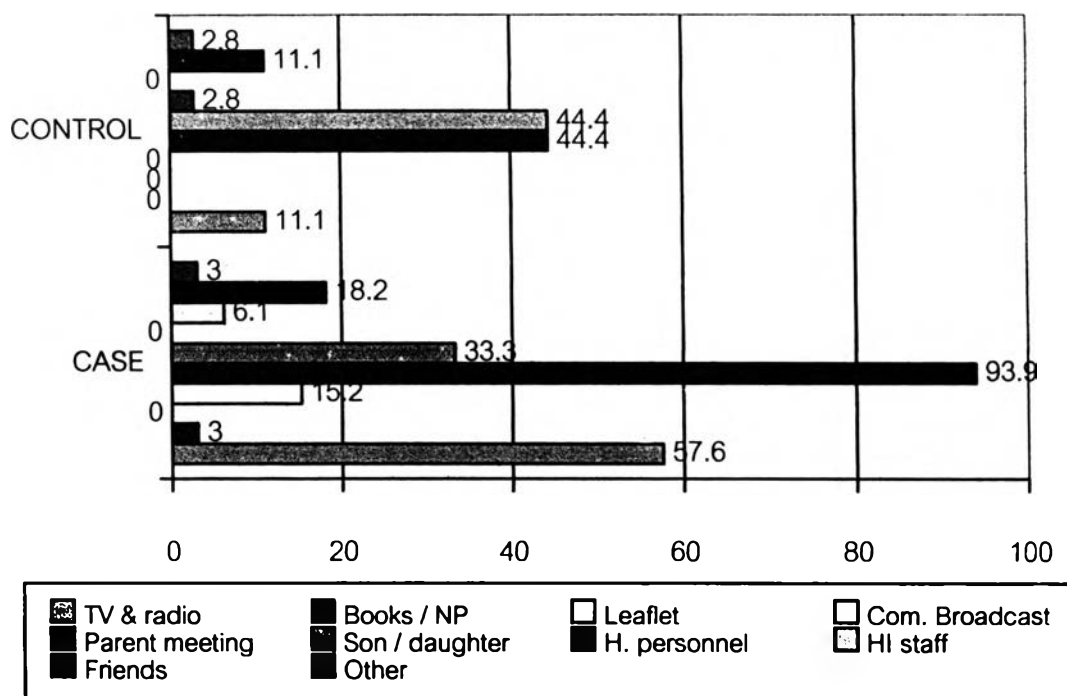
By Chi-Square test, it was found that there is statistical difference in the association between the number of people hearing about SHI and SHI participation ($P = .000$).

The sources, from which SCP have received information on SHI scheme, are as follows:

Table 19: The sources of SHI information

Hearing about SHI	Case		Control	
	n	%	n	%
+ TV / radio	19	57.6	4	11.1
+ Books / newspapers	1	3.0	0	
+ Leaflets	0		0	
+ Communal broadcast:	5	15.2	0	
+ Parents meeting	31	93.9	16	44.4
+ Sons / daughters	11	33.3	16	44.4
+ Health personnel	0		1	2.8
+ Health insurance staff	2	6.1	0	
+ Friends / relatives	6	18.2	4	11.1
+ Others	1	3.0	1	2.8

Chart 7: Sources of SHI information

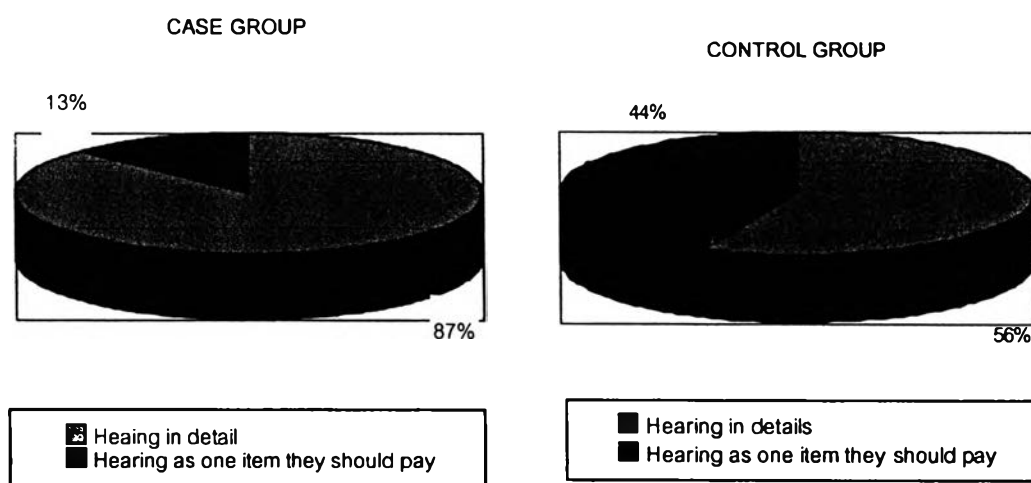


From the finding in above Table 19, it can be seen that the information on SHI that the case group received is mainly from TV / radio and parents meeting and ranged 57.6% and 93.9% respectively. Meanwhile, the information the control group received is mainly from parents meeting and their children with an equal number of 44.4%.

By Chi-Square test, it was shown that there is a significant difference in the association between the number of the SCP who received information from TV / radio or from parents meeting and SHI participation (in both test $P = .000$). But there is not difference in association between the number of the SCP who heard information from their children and SHI participation ($P = .460$). However the quality of the information on SHI in the SCP meeting raised many discussions among the managers of VHI. The finding from the survey shows that although 31 persons (93.9%) of the case group and

16 persons (57.6%) of the control group have heard about SHI information in the parent meeting, 4 persons (12.9%) of case group and 7 persons (43.75%) of control group stated that they heard about SHI information only as one of the items that they have to pay for in the beginning of the school year.

Chart 8: The ratio between the parents who were informed about SHI details and those who have heard about it as one item for which they should pay



The findings also show that the information on SHI that the SCP in both groups received from other information sources were rare (kindly see details in Table 19).

In addition, the finding also suggested one matter that Ba Vi district HISB should pay attention to is that the number of SCP who received information from health insurance staffs and health personnel is too small. This result reflected accurately the real situation of EIC activities on SHI of Ba Vi district HISB in the last

few years. The results from the in-depth interview with Mr. Vu Hoang Thanh, Head of Ba Vi district HISB, on the 6 February 2001 at the office of district HISB show that the EIC activities of HISB are too weak. The propaganda and motivation activities mainly have been done through the head teachers of schools in the district, and only once a year, in 30-45 minutes. He stated that:

“The coordination of the district Education Division with us in SHI implementation is rather good. Every year, through the meeting organized by the District Education Division to disseminate the education plan in the new school year for the head teachers of schools in the district, we are given 30 to 45 minutes to talk about SHI activities”.

Out of this activity, and from the in-depth interview, the researcher learned that in the last year the HI staff of the district had visited 5-6 schools only to propagate and motivate directly with the schoolteachers. Ba Vi district HISB has also coordinated with the district radio to organize an information program on SHI. The program was broadcast continuously within one week, two times per day and each time 15 minutes. But this program was not so effective, according to the evaluation of the head of district HISB, due to the week in which the program was broadcast also being the season of gathering maize. Neither leaflets nor posters have been used. These are issues that should be taken into consideration for SHI expansion in coming years.

From the in-depth interview, the researcher received an important suggestion from Mr. Phung Quoc Dinh, the head of SCPA. He stated that:

“The officers of district HISB should work with us. The representatives of the SPA motivate the schoolchildren’s parents easier than schoolteachers do, due to the feeling (which caused abnormal behavior of SCP), that the school asks them to pay too much. If we talk with them, they will think we do it for the benefit of schoolchildren”.

4.4.4 – Findings on SCP knowledge and attitude of SHI scheme

To know the knowledge and attitude of the people on SHI is one of the very important parts of the study. The results of this study will hopefully be useful for the managers in consideration of solutions for future expansion of the SHI scheme in the district. The following is the finding of SCP understanding and attitude of the SHI scheme:

4.4.4.1 – The finding of SCP understanding of SHI scheme objectives

Although, the findings show that there is a significant difference in association between the number of the SCP who know about two main objectives of SHI scheme (to cushion family budget against the major expense of hospitalization of children and to create conditions in schools under which children stay healthy) and SHI participation ($P = .004$ and $P = .030$). The findings also show that the number of the

SCP in Dong Thai commune who fully understand the objectives of SHI scheme is very small.

Table 20: Understanding of SCP on objectives of SHI scheme

	Case		Control	
	N	%	N	%
+ To create conditions in schools under which children stay healthy.	23	69.7	12	33.3
+ To cushion family budgets due to hospitalization of children	19	57.6	11	30.6
+ Aid treatment expenses for the poor	11	33.3	1	2.8
+ Educate children to help one another	4	12.1	1	2.8
+ Don't know	0		2	5.6

By in-depth interview, the researcher also recognized that it is not only the school –children's parents who do not fully understand the objectives of SHI but also the head teachers of the class and the head teacher of the school. The informants are confused between objectives and benefits. Mr. Nguyen Van Ngoc, a head teacher of class grade 9, stated that: "On the objectives of SHI scheme, I also only understand it is similar to other health insurance. The schoolchildren who are participating in the SHI scheme will get free service when going to hospitals for disease examination and treatment".

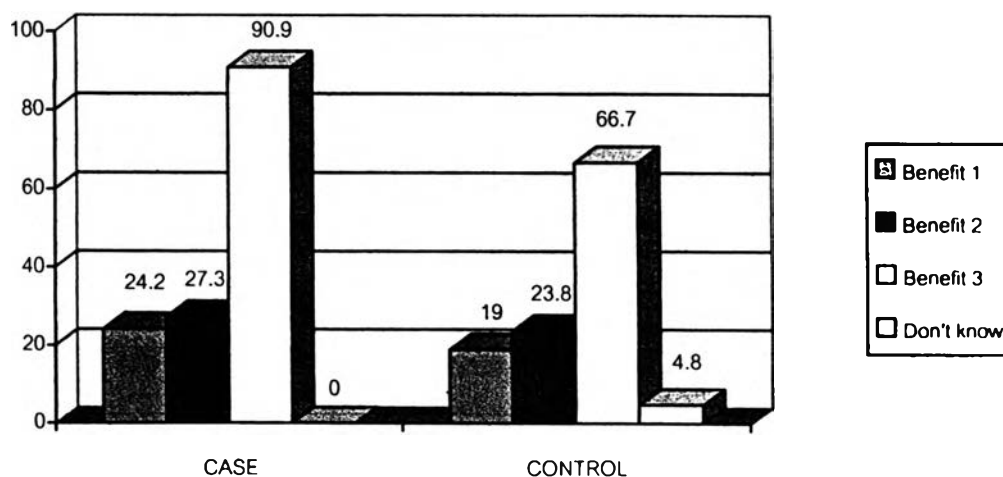
4.4.4.2 – The finding on SCP understanding of SHI scheme benefits

Table 21: SCP understanding of SHI benefits

Coverage	Case		Control	
	N	%	N	%
+ Personal hygiene, nutrition & environmental hygiene, disease prevention	8	24.2	4	11.1
+ First aid accidents / sudden illness, as well as food safety at school.	9	27.3	5	13.9
+ Hospital care	30	90.9	14	38.9
+ Don't know	0		1	2.8

By Chi-square test, the finding is strongly suggestive of an association between the understanding of the coverage of hospital care in the SHI scheme and participation ($P=.000$)

Chart 9: SCP understanding of SHI benefits



4.4.4.3 – The finding on the opinions of SCP on SHI premium

Table 22: The opinions of SCP on SHI premium

Level of SHI scheme's premium	Case		Control	
	n	%	n	%
+ Agree with 15-25 thousand Dong for PS/LSS	17	51.5	13	36.1
+ Agree with 30-40 thousand Dong for USS up	1	3.0	1	2.8
+ Following the Government regulation	31	93.9	23	63.9
+ No idea	0		2	5.6

The finding show that at least there were more than 60% of SCP in Dong Thai commune having no objection to the premium level of SHI scheme. The people follow the Government regulation. This is one of the favorable conditions for expanding SHI coverage in the future.

4.4.4.4 – Point of view of SCP on SHI

The finding on the point of view of SCP on SHI can be considered as a positive sign for Ba Vi district HISB specially, as well as for those working for SHI in Vietnam in general. The detail of the finding is presented in the following table.

Table 23: Points of view of schoolchildren's parents on SHI

SHI scheme is necessary for health care of children	Case		Control	
	n	%	n	%
+ Yes	33	100.0	30	83.3
+ No			3	8.3
+ No idea			3	8.3
Total	33	100.0	36	100.0

The result on the point of view of schoolchildren on SHI can be considered as a positive sign for Ba Vi district HISB in particular as well as for those working for SHI in Vietnam in general.

4.4.5 – Finding on SCP understanding of the main health care activities at school for schoolchildren.

Table 24: SCP understanding of main health care activities at school

Knowing some main activities of school health	Case		Control	
	n	%	n	%
+ Yes	23	69.7	11	30.6
+ No	4	12.1	7	19.4
+ No answer	6	18.2	18	50.0
Total	33	100.0	36	100.0

The finding suggested that there is significant difference between the number of the SCP who know the main health care activities at school and SHI participation ($P = .004$). And 69.7% of SCP in the case group stated that they know about the main health care activities at school. In general, the ratio of SCP in both case and control groups who really know about the main activities is rather low:

Table 25: Understanding of SCP on some main health care activities at school.

Knowing about main health care activities at school	Case		Control	
	n	%	n	%
+ Health education / management and regular check up	12	36.4	4	11.1
+ Guidance on school age disease prevention	13	39.4	1	2.8
+ Epidemic prevention / school hygiene	8	24.2	1	2.8
+ Providing first aid	4	12.1	5	13.9

This result in the above table partly reflects the activities of school health of Dong Thai Lower Secondary School in the last few years. The finding on the activities of health care at school will be presented in item 4.4.6.

Regarding the opinion of SCP on the necessity of health care activities for the children at school is as follows:

Table 26: The necessity of health care activities at school for children

Health care activities at school for children	Case		Control	
	n	%	n	%
+ Very necessary	26	78.8	24	66.7
+ Not so necessary	5	15.2	10	27.8
+ Not necessary	2	6.1	2	5.6
Total	33	100.0	36	100.0

In the average of both groups, there are still 5.8 % of SCP who view the activities of health care for children at school as not necessary. In the point of view of the Head Teachers of the School, Mr. Phan Huy Lan stated that:

“Though schoolchildren are rarely getting sick, who can know before about uncertainty. Our teachers can teach children the knowledge on personal hygiene and some simple disease prevention – these are the lessons that have been written in textbooks, but we are not health personnel. Each time there are any children, who suddenly get sick or have an accident, all our teachers are very bewildered and worried. Especially, our children are living in a rural area; every day before going to school, some have breakfast, some do not, and some have manioc or sweet potato as breakfast. If there is any child who unfortunately is manioc-sick at school, we don't know and give him or her medicine as treatment for a simple case of headache; the effect will be difficult

to estimate. Children are normally very active, some accidents at school cannot be avoided...., It is necessary to have a school health care unit to take care of the health of children at school. We hope that with the development of SHI scheme we can have some additional budget to set up this unit”.

4.4.6 – Findings on school health activities

From the in-depth interview, the researcher found that school health activities of Dong Thai Communal Lower Secondary School are still very poor. Up to the present time, there are still no health personnel working at the school. One Administrator is appointed to work part-time for health activities in the school. The facility for school health activities is not set up yet; the school has only a small cabinet for medicine with few common medicines, medical oil, cotton and bandages. Some years there are regular health check ups for schoolchildren, some years there are not. One thing should be recognized, the school teachers have tried their best to do some things for improving the health status of the children. For example, last year, the school in collaboration with the Goiter Control Program organized an examination for children manifesting iodine deficiency, though activities like this are still few. However, the weakness in school health care activities of Dong Thai LSS are partly responsible for SCP not fully understanding about school health care activities. It could be considered as one of the factors affecting the participation of SCP in the SHI scheme.

4.4.7 – Health status of schoolchildren and health care seeking behavior of SCP

4.4.7.1 – Health status of schoolchildren

Due to some limitation in the study (see pp. 111-112 for a description of these limitation), the following finding can be only partially reflect the health status of schoolchildren of Dong Thai Communal LSS – one of the factors leading to the need of health care and health insurance in schoolchildren.

Table 27: Health status of schoolchildren during the year 2000

Number of times	Case		Control	
	n	%	n	%
+ Sudden illness / accident at school	2	6.1	4	11.1
+ Number of times missing class ≥ 1 day due to health reasons	6	18.2	10	27.8

The rate of sudden illness or accident at school and number of times missing classes ≥ 1 days due to health reasons for schoolchildren in the control group is slightly higher than the case group. However, this difference indicates that presently the health status of children in Dong Thai school is associated with the need for health insurance.

4.4.7.2 – Health services seeking behavior of SCP

Table 28: Health services utilization of schoolchildren

Health facilities	Case		Control	
	n	%	n	%
+ Self medication	2	33.3	3	30.0
+ At CHP	1	16.7	1	10.0
+ Private practitioner	3	50.0	5	50.0
+ DHC	1	16.7	0	0
+ Provincial hospital	3	50.0	0	0
+ Central level hospital	0	0	0	0

In both groups, case and control children tend to use the services of private practitioners or self-medication more than the CHP or DHC services. One of the explanations may be that the illnesses of the children are not serious. That can be proved by the average expense for one treatment course of pupils who not covered by the SHI scheme, which is only 49,562 VND (equivalent to US\$ 3.4) (fact from the finding of the study). In the case group, the children may have more favorite conditions; therefore the frequency of procuring health services at the provincial hospital is 50.0%.

4.4.8 – The reason the control group quit enrollment

Table 29: The reason control group quit enrollment

The reasons	Control	
	n	%
+ Their child is rarely ill	6	16.7
+ Haven't seen the advantages of SHI yet	31	86.1
+ Paying hospital fee directly is better	0	0
+ Dissatisfied with the quality of health care / services	3	8.3
+ SHI doesn't cover out patient	0	0
+ Have bought other insurance cards	2	5.6
+ Family is too poor to buy	3	8.3
+ Have financial difficulty at beginning of the school year due to paying for many items at the same time	12	33.3
+ Schoolteachers don't suggest buying SHI	6	16.7
+ Others	8	22.2

The main reason for not yet participating in the SHI scheme for most schoolchildren is that the SCP have not seen clearly the advantages and benefits of the scheme (86.1%). The second reason that should be taken into consideration is the financial difficulty of 33.3% of SCP (although in different level) in the beginning of the school year.

4.4.9 – Foreseen number of participants in the coming year:

Table 30: Foreseen number of participants in the coming year

The answer	Case		Control	
	n	%	n	%
+ will buy SHI cards	31	93.9	14	38.9
+ Not decided yet	2	6.1	19	52.8
+ Will not	0	0	3	8.3
Total	33	100.0	36	100.0

Getting in and dropping out is typical in many kinds of insurance. But in Dong Thai Communal Lower Secondary School, the SHI scheme was just implemented last year. From the study, there are 2 (6.1%) SCP who may not continue to buy in the coming year. If some drop out, this occurrence will affect to others. Therefore, Ba Vi district HISB should be concerned with this occurrence. However, on the other hand, it can be seen as a positive sign that in the control group there are 19 persons (52.8 %) who are not decided yet, but there are 14 persons (38.9%) who intend to buy next year.

4.5 – Discussions and Conclusions:

With the findings from the survey of 69 subjects (33 subjects considered as case group and 36 subjects considered as control group) and the findings from in-depth interviews with 5 key informants (head of SPA, head teacher of the school, one

head teacher of one class, head of Ba Vi HISB and vice director of Ba Vi DHC), the researcher found that:

- There are no associations between the gender, age, relationship (between subjects with children), education and occupation of the schoolchildren's parents with SHI participation.

- The economic situation of schoolchildren's parents could be considered as having no association in terms of the sum that they have to pay as premium. The matter is the point of time. If the point of time for buying cards could be changed and spread out, the problem would be solved.

- The health status of schoolchildren and habit of using health services show no difference in an association with SHI participation.

- There are 3 factors which could be considered as the main factors that have affected the participation in the SHI of SCP of Dong Thai Communal LSS:

1 – The information on SHI comes to the parents of schoolchildren from quite a few sources in terms of information, but it is too poor in terms of quality, not in time in terms of timing and not so effective in terms of manners.

- Of 10 sources of information, only 3 sources have the more than 30% rate of approaching the SCP (parents meeting 69.15%, son or daughter

38.85% and TV or radio 34.35% average for both groups). For other sources the rate of approaching SCP is only 2.8% or 3.0% (such as books and newspapers and health personnel). The parents have never seen any leaflets on SHI information. One thing that should be mentioned is that the rate of parents who received information from health insurance staff is only 3.0% , if divided to average for both groups.

- Of 3 information sources which were considered as having the rates of approaching SCP higher than the others, only 2 information sources which are the parents meeting and TV / radio can be considered as encouraging factors in relation to SHI participation.
- Only one program on SHI has been broadcast on the district radio in the year 2000, but this occurred in the week when people in the district were busy gathering maize.
- The activity of providing information in the SCP meeting was mainly based on the teachers of the school, but they themselves did not have enough information on SHI scheme.
- To motivate the SCP buying SHI cards, district HISB should work together with not only the head teachers of schools meeting organized by the District Education Division, but also with all class head teachers in the school and the representatives of SCPA.

2 – SCP are not knowledgeable on SHI and activities of health care for the children at school.

- Regarding the objectives of SHI scheme: for the first objective (to create a condition in schools, under which children stay healthy), there are only 23 parents (69.7%) in the case group and 12 parents (33.3%) in the control group who know about this objective; for the second objective (to cushion family budgets against the major expense of hospitalization) the number of parents who know about it is similar, 19 parents (57.6%) of the case group and 11 parents (30.6%) of the control group.
- Regarding the benefits, which are covered by SHI scheme, the understanding of the schoolchildren's parents is worse except for the benefit of free hospital care: 30 parents (90.9%) of the case group and 14 parents (38.9%) of the control group.
- There are 4 main activities of health care at school for the children. With the first activity (carrying out health education, management and regular checkups for the children), there are 12 parents (36.4%) of the case group and 11 parents (30.6%) of the control group who know about it. Regarding the second activity (guidance on school age disease prevention), there are 13 parents (39.4%) of the case group and only 1 parent (2.8%) of the control group who know about it. For the third activity (carrying out epidemic prevention at school and school hygiene) and the fourth activity (providing first aid when necessary), the results

are presented in page 99, which show that the understanding of SCP is not better than their understanding about the above two activities but worse.

That the SCP are not knowledgeable on SHI and the activities of health care for the children at school may be due to many reasons, but one of the main reasons is the weakness of IEC activities of Ba Vi district HISB. A second reason that should be considered is due to SCP themselves; they should actively approach or seek the information. And another reason is due to the system of health care at schools for children is not developed yet.

3 - The finding on the health care facility and activities presented in item 4.4.6 showed that the facility for health care at school of Dong Thai Communal LSS is too poor, health care activities are still limited.

Three above-mentioned factors have lead to a majority of SCP not seeing the advantages and attractiveness of the SHI scheme yet. That is the main barrier to participation in the SHI scheme. By Chi-square test, the finding strongly suggests an association between the number of the parents with SHI information from the parent meeting or from TV or radio and SHI participation.

To expand the coverage of SHI in coming years in Ba Vi district in general, in Dong Thai commune in particular, there are several solutions, but the most important ones are:

(1) - The IEC activities of Ba Vi district should be improved:

- The quality of information should be improved.
- The frequency of activities should be increased,
- The sources of information should be increased,
- The method and manner should be changed such as collaboration with SPA in motivation on SHI...,.

(2) – While improving the IEC activities, the health care facility at the school should be set up with concrete activities such as health checkups, de-worming intervention etc..., to make the SCP see the benefits of the SHI scheme and school health care activities.

4.6 – Lessons learned:

The objective of the data exercise is to develop the skill of the researcher in carrying out research work in the future. The lessons gained from this data exercise process are as follows:

- The most important lesson of the study is that the objectives of the study and methodology applied should be identified at the beginning of the work.
- In carrying out a case-control study, over-matching problems should be avoided.

- The data collection instruments should be well planned. The instruments used in this study are questionnaire and guideline for in-depth interview. The questionnaire should be short but ensure that the necessary information can be collected, and is clear, easy for respondents to provide accurate information. The questionnaire should be well designed for data analysis later on. Circumstances of the respondents should be considered when designing the questionnaire.

- Limitation in human recall is one of the lessons the researcher has learned from the study. For example, when asking for the information of how many times the child was absent from the class \geq one day due to health reasons in the year 2000, not all schoolchildren can remember exactly.

- The support of local government and related institutions is needed to ensure the study can be carried out smoothly. During the time the survey was carried out in Dong Thai commune, the researcher has received considerable support from DHC of Ba Vi district, from the People's Committee of Dong Thai Commune and the teachers of Dong Thai LSS.

- To prevent bias, the training for study interviewers in proper interview method or re-interviewing some samples should be conducted, if possible, to prevent bias.

- Checking data in the field daily by the supervisor or researcher is very necessary to found out the mistake.

- Timing is also the lesson for the researcher to learn, especially when carrying out the survey in a countryside area. The time of farmers cultivating young rice or gathering in crops should be taken into consideration.

- For in-depth interviews there should be at least two persons; one to conduct interview, the other to take notes and record. How to follow the speed in speaking and interest of respondents is another lesson the researcher has learned from this study. Although for in-depth interview, the guideline was designed but some time respondents will not follow it. The researcher should know how to listen and how to guide respondents to the information needed for the study.

4.7 – Limitation and Constraints:

- The questionnaire design partly limited the information that the researcher would collect.

- In the future, particularly if the results are to be generalized nationwide, the number of subjects should be larger enough for the need of a study sample size to validate of the finding.

- The control group was selected from the same commune; therefore, it may be in effect matching for socioeconomic status and cultural characteristics. It should be noted that this was a local analysis and that any nationwide model and application would have to consider a wide variety of socioeconomic and cultural differences.

- The first constraint when the researcher carried out this data exercise was the time. The time the researcher could have to do this exercise within the context or schedule of his academic work was four weeks from January 19 to February 18, 2001. During this time, people the researcher needed to contact to carry out the exercise spent almost two weeks celebrate TET (New Year Festival of Vietnam). And unexpectedly, in this year, after TET was the time for farmers planting young rice; therefore, interviews were done only in noon time or evening time.

- The weather was not fine, drizzling rain and cold wind came from the North, some days the temperature was down to under 10°C. These limited the interviewers moving from village to village of the interviewers.