

CHAPTER IV

RESULTS

The results of this study were shown as cross-sectional descriptive. The objective was to explore perceptions and health behaviors toward Avian Influenza at Suantaeng Sub-District, Muang District, Suphan Buri Province. The samples were 172 backyard poultry farmers. The data collection was conducted on July 2007 - August 2007. The results were presented in six parts as follows;

Part I: General Information

Part II: Perceptions toward Avian Influenza

Part III: Health Information Receiving toward Avian Influenza

Part IV: Health Behaviors toward Avian Influenza

Part V: Levels of Perceptions and Health Behaviors toward Avian Influenza

Part VI: Relationship between Perceptions and Health Behaviors toward Avian Influenza

Part I: General Information

The socio-demographic characteristics and native chicken information of 172 samples were shown by number and percentage in Table 1 and Table 2 (n = 172).

Table 1 Number and percentage of backyard poultry farmers were categorized by socio-demographic characteristics.

Socio-demographic characteristics	n	%
Gender		
Male	99	57.6
Female	73	42.4
Age (years) (\bar{X} = 53.4, S.D. = 14.0)		
Less than 45	56	32.6
46-60	61	35.5
61-75	45	26.2
More than 75	10	5.8
Marital status		
Single	16	9.3
Married	150	87.2
Widowed/Divorced/Separated	6	3.6
Education		
Illiterate	10	5.8
Primary	150	87.2
Secondary	9	5.2
Diploma/Undergraduate	3	1.8
Occupation		
Farmer	97	56.4
General employee	46	26.7
Merchant/Business	8	4.7
Government Officer	3	1.7
Unemployed	18	10.5

Table 1 (cont.) Number and percentage of backyard poultry farmers were categorized by socio-demographic characteristics.

Socio-demographic characteristics	n	%
Income (Baht/Month)		
< 2,500	20	11.6
2,500 – 5,000	70	40.7
5,001 – 7,500	22	12.8
7,501 – 10,000	21	12.2
> 10,000	24	14.0
Not specify	15	8.7
Social Status		
Village member	129	75.0
Housewife club member	15	8.7
Aging club member	11	6.4
Community leader	9	5.2
Public health volunteer	8	4.7
Number of family (Persons)		
1 – 2	20	11.7
3 – 4	73	42.4
5 – 6	53	30.8
7 – 8	23	13.4
> 8	3	1.7

According to the data obtained in Table 1, it was showed that 57.6% of the samples were male more than female 42.4%. Most of them were between 46 and 60 years old and 35.5%. In term of marital status, the majority of them were married 87.2%. Most of all was graduated from primary school 87.2% and half of them were farmer 56.4%. Regarding, 40.7% of the samples' income was ranged from 2,500 to 5,000 baht. In addition, almost of them were village member 75.0%. It was found that of the samples' family member was a ranged 3 – 4 persons 42.4%.

Table 2 Number and percentage of native chicken were categorized by general characteristics.

characteristics	n	%
Number of native chicken (heads)		
1 – 20	64	37.2
21 – 40	49	28.5
41 – 60	28	16.3
61 – 80	10	5.8
81 – 100	17	9.9
100 – 120	4	2.3
Total	172	100
Native chicken size		
Small (1-40 heads)	113	65.7
Medium (41-80 heads)	38	22.1
Large (81-120 heads)	21	12.2
Total	172	100
Raising modes (answer more than one choice)		
Free range backyard	160	48.8
In the cage	117	35.7
In the large basket/fishing net	43	13.1
Under the house	5	1.5
in the building	3	0.9
Total	328	100
Fecal disposal (answer more than one choice)		
Manure	92	41.4
Leave in the yard	90	40.5
Leave in the garbage	36	16.2
Feed for fish	4	1.8
Total	222	100
Carcass disposal (answer more than one choice)		
Bury	158	58.5
Leave in the garbage	80	29.6
Burn	23	8.5
Leave under the plant	6	2.2
Throw in the river	3	1.1
Total	270	100

Table 2 (cont.) Number and percentage of native chicken were categorized by general characteristics.

characteristics	n	%
In 2004-2005 Avian Influenza outbreak,		
there were found sudden sick /death native chicken		
Sudden sick native chicken (n = 172)	135	78.5
Sudden death native chicken (n = 172)	131	76.2
The Report on sudden sick /death native chicken		
Reported sudden sick/death native chicken	111	80.4
No necessity for report	27	19.6
Total	138	100
The agents who were reported		
Community leader	49	32.9
Livestock officer	30	20.1
Public health officer	27	18.1
Municipality officer	23	15.4
Local administrative officer	13	8.7
Public health volunteer	7	4.7
Total	149	100

As Table 2, it was found that 37.2% of the samples raised native chicken in range from 1 to 20 heads per household. Native chicken size was small 65.7%. Almost half of samples raised the native chicken in free range backyard kind of way 48.8%. Interestingly, they used feces for manure plantation 41.4%. Moreover, they buried carcass as the sort of disposal 58.5%. According to Avian Influenza situation in 2004 – 2005, it indicated that 78.5% of the native chickens were reported as sick cases and 76.2% of them were reported as sudden death. Furthermore, there was the report on sudden sick/death the native chicken 80.4%. The community leader was the most agents to be reported 32.9%.

Part II: Perceptions toward Avian Influenza

Perceptions of susceptibility and severity toward Avian Influenza were measured by number and percentage as shown in Table 3 (n = 172).

Table 3 Number and percentage of perceptions toward Avian Influenza in each item

Perceptions	Agree		Uncertain		Disagree	
	n	%	n	%	n	%
1. Avian Influenza is often found in native chickens.	120	69.8	5	2.9	47	27.3
2. Avian Influenza occurs mainly in birds and highly contagious among wild birds.	145	84.3	4	2.3	23	13.4
3. If native chickens are depression and droopiness, bluish coloring of wattles and comb, edema and swelling of head, it is suspected unusual sick.	152	88.4	2	1.2	18	10.5
4. The symptom of Avian Influenza patient has a high fever, fatigue and muscle aches.	122	70.9	26	15.1	24	14.0
5. Avian Influenza is easily infected with human transmission.	97	56.4	6	3.5	69	40.1
6. Touching secretion of the native chickens cannot be infected with Avian Influenza.	110	64.0	20	11.6	42	24.4
7. If native chickens are sudden death without illness, it is the signs of unusual death.	158	91.9	2	1.2	12	7.0
8. Sudden sick/death native chicken can be cooked without dangerous.	22	12.8	3	1.7	147	85.5
9. Wearing mask/gloves can be protected Avian Influenza.	166	96.5	3	1.7	3	1.7
10. Backyard poultry farmers are the high risk group toward Avian Influenza	145	84.3	3	1.7	24	14.0
11. The free range raising mode is not related in Avian Influenza outbreaks.	117	68.0	6	3.5	49	28.5
12. Sudden sick/death native chicken can be sole.	9	5.2	1	0.6	162	94.2
13. Carcasses disposal is buried in the deep hole that other animals can not dig it.	168	97.7	-	-	4	2.3
14. Using the same chop for chicken meat, vegetable, fruit and well-cooked food is not any danger.	113	65.7	3	1.7	56	32.6
15. Some raw meat chicken/ a raw egg can be safely eaten.	9	5.2	1	0.6	162	94.2
All items	1,653	64.0	85	3.3	842	32.6

Table 3 was revealed that 97.7% of the samples had agreement in burying carcass disposal. The next priority, they had agreement in wearing mask/gloves for Avian Influenza protection 96.5% and the signs of unusual death native chicken 91.9%, respectively. They had disagreement in selling sudden sick/death native chicken and eating some raw meat chicken/raw egg 94.2%. In addition, they had uncertain in the symptom of the Avian Influenza patient 15.1% and touching secretion of the native chicken 11.6%. Obviously, the samples had been agreement that the free rang raising mode was not related in Avian Influenza outbreaks 68.0%. The samples used the same shop for chicken meat, vegetable, fruit and well-cooked food was not any danger 65.7%. Likewise, they remained touching secretion of the native chicken was not related to transmission of Avian Influenza 64.0%.

Part III: Health Information Receiving toward Avian Influenza

The health information receiving among backyard poultry farmers were shown in Table 4 (n = 172).

Table 4 Number and percentage of health information receiving were categorized by Avian Influenza information receiving, source of Avian Influenza information and the best source of Avian Influenza information.

Health Information Receiving	n	%
Avian Influenza information receiving		
Received	170	98.8
Do not received	2	1.2
Sources of Avian Influenza information (answer more than one choice)		
Advertisement	284	48.0
Government sector	186	31.4
Community sector	122	20.6
Total	592	100
The best source of Avian Influenza information		
Television	92	54.1
Public health officer	32	18.8
Community leader	21	12.4
Broadcasting	13	7.7
Livestock officer	3	1.8
Municipality officer	3	1.8
Newspaper	2	1.2
Local administrative officer	2	1.2
Neighbor	1	0.6
Radio	1	0.6
Total	170	100

Table 4 was indicated that most of subjects were informed of Avian Influenza 98.8%. The most popular source of Avian Influenza information was advertisement 48.0%. In addition, the effective sources of Avian Influenza information were voted for television, public health officer and community leader, in the proportion of 54.1%, 18.8% and 12.4%, respectively.

Part IV: Health Behaviors toward Avian Influenza

Health behaviors of backyard poultry farmers were measure by number, percentage in Table 5 (n = 172).

Table 5 Number and percentage of health behaviors toward Avian Influenza in each item

Health Behaviors	Always		Sometimes		Never	
	n	%	n	%	n	%
1. You provide fishing net/cage/basket in the area you raise your native chickens.	66	38.4	19	11.0	87	50.6
2. You leave native chicken feces in the yard.	62	36.0	54	31.4	56	32.6
3. You do not use native chicken feces to manure.	42	24.4	57	33.1	73	42.4
4. You touch your native chicken by bare hand.	88	51.2	60	34.9	24	14.0
5. You do not sell sudden sick/death native chickens.	134	77.9	-	-	38	22.1
6. You destroy carcass by burying in the deep hole that other animals can not dig it.	151	87.8	13	7.6	8	4.7
7. You throw carcass in the river.	2	1.2	9	5.2	161	93.6
8. You wash your hand by soap after touching your native chicken.	101	58.7	56	32.6	15	8.7
9. At home, the same chop is used for some raw meat chicken, vegetable, fruit and well-cooked food.	113	65.7	16	9.3	43	25.0
10. You eat some raw meat chicken.	2	1.2	6	3.5	164	95.3
11. You eat a raw egg.	1	0.6	14	8.1	157	91.3
12. You see a doctor when you have high fever, fatigue and muscle aches.	102	59.3	46	26.7	24	14.0
All items	864	41.9	350	16.9	850	41.2

According Table 5, the samples were to always practice to bury carcass in the deep hole 87.8%, not sell sudden sick/death native chicken 77.9% and use the same chop for some raw meat chicken, vegetable, fruit and well-cooked food 65.7%. The samples were to sometimes practice to touch native chicken by bare hand 34.9%. In contrast, the samples were to never practice to eat raw meat chicken 95.3% and never throw carcass in the river 93.6%, respectively.

Part V: Levels of Perceptions and Health Behaviors toward Avian Influenza

The levels of perceptions and health Behaviors toward Avian Influenza were illustrated in Table 6 (n = 172)

Table 6 Levels of Perceptions and Health Behaviors toward Avian Influenza

Variables	n	%
Levels of perceptions (Total scores = 45)		
Low (less than 34.3 scores)	24	14.0
Moderate (between 34.3-40.1)	125	72.7
High (more than 40.1)	23	14.0
Levels of health behaviors (Total scores = 24)		
Poor (less than 13.3 scores)	27	15.7
Fair (between 13.3-18.7)	121	70.3
Good (more than 18.7)	24	14.0

As regard in Table 6, it was found that 72.7% of the samples was a moderate of the perception level, with a range from 34.3 to 40.1 scores ($\bar{X} = 37.2$, S.D. = 2.9). According health behaviors, 70.3% of the samples was a fair level of health behavior, with a range from 13.3 to 18.7 scores ($\bar{X} = 16.0$, S.D. = 2.7).

Part VI: Relationship between Perceptions and Health Behaviors toward Avian Influenza

The relationship between perceptions and health behaviors toward Avian Influenza among backyard poultry farmers were shown in Table 7 (n = 172).

Table 7 Relationship between perceptions and health behaviors toward Avian Influenza

Variables	Health Behaviors	
	r	p-value
Perceptions	0.1	0.2

Table 7 was indicated that there was no relationship between perceptions and health behaviors toward Avian Influenza at the .05 level (2-tailed) ($r = .1$, $p = 0.2$).