

## CHAPTER V

### CONCLUSIONS AND DISCUSSIONS

#### Conclusions

This research explored perceptions and health behaviors toward Avian Influenza among backyard poultry farmers. The study was identified perceptions, health behaviors and determined the relationship between perceptions and health behaviors. The simple random sampling technique was used by lottery method in order to recruit the samples. The samples were 172 backyard poultry farmers at Suantaeng Sub-District, Muang District, Suphan Buri Province. The research instrument was the questionnaire. Data analyzed were numerically shown in number, percentage, mean, standard deviation, and Pearson product-moment correlation coefficient. The results were presented as follows;

#### 1. General Information

Almost of the samples was male 57.6% more than female 42.4%. Most of the samples, 35.5% were in the range between 46 and 60 years old. The samples were marriage status 87.2% and graduated from primary school 87.2%. In terms of career, about half of the samples were farmer 56.4%. Regarding, 40.7% of the samples earn income in the range from 2,500 to 5,000 baht per month. In addition, three fourth of them were village members 75.0%, the rest of them take the kind of social status role. It was found that most of samples, 42.4%, had family member of 3-4 persons.

As soon as the poultry raising modes were concerned, 37.2% of the samples owned native chicken in range from 1 to 20 heads per household. For native chicken size was illustrated in small 65.7%; range from 1-40 heads of native chickens. Almost half of them, 48.8%, raised their native chicken in free range backyard kind of way. Interestingly, they used feces for manure plantation 41.4%. Considering raising modes, more than half of the samples, 58.5%, buried their carcass as the sort of elimination. According to Avian Influenza situation in 2004 – 2005, it indicated that almost of native chicken was reported as sudden sick cases 78.5% and reported as sudden death 76.2%. Also, there was a report of

sudden sick/death cases to government sector 80.4%. In addition, 32.9% of situation reported were to inform and report to the community leaders.

## 2. Perceptions toward Avian Influenza

Almost all of the samples did agree to bury carcass disposal, 97.7%. For the second priority, they agreed in wearing mask/gloves for Avian Influenza protection 96.5%. Also, 91.9% of them agreed in the signs of unusual death or sudden death of native chicken. In addition, 94.2% of the samples disagreed about selling sudden sick/death native chicken and eating some raw meat chicken/raw egg. In addition, 15.1% of the samples were uncertain about the symptom of the Avian Influenza patient, also 11.6% of them were uncertain about touching secretion of the native chicken. Previously, 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%.

## 3. Health Information Receiving toward Avian Influenza

Most of participants, 98.8%, received Avian Influenza information. 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 54.1%, 8.8% and 12.4%, respectively.

## 4. Health Behaviors toward Avian Influenza

As far as health behaviors toward Avian Influenza was concerned. 87.8% of the samples always practice to bury carcass in the deep hole. There were 34.9% of the samples sometimes practice touch native chicken by bare hand. Almost all of them never practice eat some raw meat chicken 95.3% and never throw carcass in the river 93.6%.

### 5. Levels of Perceptions and Health Behaviors toward Avian Influenza

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).

### 6. Relationship between Perceptions and Health Behaviors toward Avian Influenza

There was no statistically significant the relationship between perceptions and health behaviors, as illustrated ( $r = .1$ ,  $p = 0.2$ ).

## Discussions

The results of this study are discussed as follows;

### Perceptions toward Avian Influenza among Backyard Poultry Farmers

Table 3 views the samples' perceptions toward Avian Influenza. It is shown that the samples do agree in burying about carcass disposal, wearing mask and gloves for Avian Influenza protection, and, also the sign of native chicken unusual death. However, some of the samples disagree about selling sudden sick/death native chicken and eating some raw meat chicken/raw egg. In addition, some of the samples are uncertain about the symptom of the Avian Influenza patient and touching secretion of the native chicken.

Focus on the level of perceptions, it was illustrated that most of the samples are the moderate level. It is indicated by the rank of score. Due to the fact that almost all of the samples are poultry farmers, therefore, the samples agree about perceptions of the severity and susceptibility toward Avian Influenza. Those findings support Suvichai P. (2006) investigated 51.00% of the samples had high score of Avian Influenza knowledge and 89.50% had positive attitudes and perception. Nevertheless, this finding is differed from the study from Takeuchi M.T. (2006) investigated 72.00% of participants had backyard chickens but participants were aware of the symptoms of HPAI in poultry only 6.00%.

To consider in more details, the samples do agree about wearing mask/gloves. In other words, they are uncertain about the symptoms of the Avian Influenza patient. In contrast, some of the samples disagree in perceptions of susceptibility and severity toward Avian Influenza. For example, 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%. Our data confirms that Fielding et al. (2005) revealed that risk perception of Avian Influenza was low potentially important health threats in Avian Influenza in Hong Kong.

#### **Health Behaviors toward Avian Influenza among Backyard Poultry Farmers**

Table 5 illustrates health behaviors of the samples. It views that the samples always practice to bury carcass disposal, while they sometimes practice to touch native chicken by bare hand. However, they never eat some raw meat chicken, throw carcass in the river and eat some raw egg.

The health behavior level of the samples is shown in fair level. It is mainly that the samples share the similar characteristic of poultry farmer. It can be viewed that this finding disagrees with Laoluekeat S. (2006) explored the preventive health behavior. The sample had the appropriate behavior 31.40%.

To consider in details, the samples never eat some raw egg as indicated in the good practice of such behavior. Furthermore, the samples sometimes practice in the following behaviors; leave feces in the yard, provide equipment in the native chicken raising area, and not use feces to manure. In line with Suvichai P. (2006) identified 79.50% of the samples had appropriate practices in prevention of Avian Influenza transmission.

In contrast, the samples good practice as numerically indicated by the number and percentage of listed health behaviors such as not sell sudden sick/death native chicken, throw carcass in the river. Accordingly, it can be shown that some of the samples still touch native chicken by bare hand and use the same chop for meat, vegetable, fruit and

well-cooked. In support of Olsen et al. (2005) conducted a community cluster survey in Nakhon Phanom Province. The results revealed that public health education campaigns and general media reports about Avian Influenza appeared to have been effective in reaching rural people. Despite widespread knowledge about Avian Influenza and the effective means of protection, Thai people had not changed their behaviors. The data confirms that Abbate et al. (2006) proposed that it was perceived to be a low occupation hazard and wearing protective equipment and hand washing were not routine practices. Knowledge of transmission and preventive measures should be improved.

#### **Relationship between Perceptions and Health behaviors toward Avian Influenza among Backyard Poultry Farmers**

Table 7 presents the relationship between perceptions and health behaviors toward Avian Influenza among backyard poultry farmers. It is found that there has been statistically no relationship between perceptions and health behaviors toward Avian Influenza among the samples. It leads to the points that perceptions and health behaviors toward Avian Influenza of the samples are not related. To be precise, the samples are at a moderate level of perceived severity and susceptibility toward Avian Influenza, however, their health behaviors toward Avian Influenza are likely to be such raising modes, cooking, consumption of the chicken products, in which not influencing by perceptions of severity and susceptibility toward Avian Influenza. Interestingly, this finding agree with Health Belief Model in that each individual has own perception of the likelihood of experiencing a condition that would adversely affect one's health. Individuals vary widely in their perception of susceptibility to a disease or condition. In addition, this finding is consistent with Health Belief Model that those individuals at the high extreme of susceptibility feel there is real danger that they will experience and adverse condition or contact a given disease.

## Suggestions

1. The current government Avian Influenza control policies and strategies are based on epidemiological aspects of disease control, but not based on information of the socio-economic impacts on the backyard and small poultry producers. The small farmers have little voice/ impact in policy making and decisions about the poultry sector but are very much affected in terms of livelihood. The viability and effectiveness of AI control strategies should take the socio-economic perspectives into consideration.

2. The Avian Influenza strategy is needed two types of communication response;(1) outbreak/risk communication that focuses on how authorities responsible for animal and human health assist in mobilizing the media and other channels to provide communities with timely and accurate information, and (2) behavior change communication that focuses on how individuals, communities and institutions can reduce risks through changed or modified behavior. Advocacy with national and sub-national government counterparts underpins the success of behavior change and outbreak communication, as both strategies remain the responsibility of the government authority.

3. The Ministry of Public Health, Thailand should be implemented this results to develop preventive health behavior guidelines toward Avian Influenza such as "how to; avoid touching secretion of native chicken, raise safely free range mode and use the same chop (avoid to use the same chop).

4. It is necessary to initiate participatory action research in the re - emerged area to find out the roadmap for preventive Avian Influenza sustainability.