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The correlation between knowledge of influenza and perceived risk of influenza among clients in outpatient department of Yalasiriratthanarak Hospital☆

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Abstract In this descriptive research investigation, the researcher studied the correlation between knowledge of influenza and perceived risk of influenza among clients in outpatient department of Yalasiriratthanarak hospital. The sample population consisted of 384 clients in outpatient department of Yalasiriratthanarak hospital, Thailand. The subjects were selected using the method of purposive sampling on April 2019. The instruments of research consisted of a questionnaire eliciting data concerning knowledge and perceived risk of influenza.

Finding, the statistical significance of the correlation among knowledge of influenza and perceived risk of influenza among clients in outpatient department of Yalasiriratthanarak hospital ($p < 0.01$).

The result can be used as the data to promote a perceived risk of influenza among clients in outpatient department of Yalasiriratthanarak hospital and further research.

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Introduction

Influenza is worldwide pandemic disease including the Asian region. In this region the disease has a tendency to increase continuously in some areas, but the influenza situation in Thailand is reduced. Disease surveillance data in 2018 found 181,949 patients from 77 provinces, representing 278.10 sickness per 100,000 population, 31 deaths equal to 0.05 death per 100,000 population. It is found mostly among females more than males and mostly in the age group of 25–34 years of age.[1]

Yalasiriratthanarak hospital is in Yala province in the southern border of Thailand. Here it was currently found that number of influenza patients and the symptoms associated with influenza are increasing. According to the hospital database,[2] there are 248 cases in 2017, and in 2018 increased to 430, which is 1.7 times that of 2017. In 2017, most of the hospital's service users are police officers and their families, including students, police cadets and people in the area. It was found that the school age group (children, families of the police officers) are most ill with the influenza. Next was the working group which are the police officers and their spouse and other government officials. Influenza occur mostly among police officers which affect their work as the recovery time is prolonged and as a result security is at unrest continuously.

From the literature review,[1,2] it was found that climate of southern border of Thailand experience heavy rain and the weather is cool all year round. This weather is suitable for influenza resulting in the wide occurrence of influenza in this region. Combining with a review of relevant literature,[3–8] it was found understanding public perceived risk toward influenza pandemics is important for minimizing the effects of such events. There are many factors that affect the person's influenza as perceived by the lifestyle, occupation, knowledge and other factors. Previously no studies were conducted at Yalasiriratthanarak hospital. Therefore, this research project was undertaken in order to be informed of the correlation between knowledge of influenza and perceived risk of influenza. The information obtained from this research can be used as a database to adapt to the planning and measurement to prevent influenza and reduce the rate of illness and influenza pandemic among client in outpatient department of Yalasiriratthanarak hospital.

Methods

A descriptive research was conducted. The sample group used in this research consisted of 384 people. Calculated from the unknown population size using the formula of W.G. Cochran.[9] The sample group was carefully selected based on those who received the service during April 2019 as outpatients and the inclusion criteria for the sample group must comply with the following criteria:

Inclusion criteria

(1) Age between 20–60 years old
(2) No communication problem or without any hearing disorders
(3) Able to understand and speak Thai
(4) No serious illness that hinders participation in the study
(5) Voluntary participation and consent was taken from the participants in research

Exclusion criteria

(1) Age does not meet the admission criteria
(2) Communication and hearing disorders
(3) Unable to understand and speak Thai
(4) Have severe illnesses that hinder participation in the study
(5) No voluntary participation i.e. not willing to participate in the research
(6) Request to withdraw from research participation

The researcher interviewed the participants for general information of research and used the questionnaire as a tool for data collection at this time (content validity by IOC and reliability by Cronbach's alpha coefficient),

The following tools were used:

1. Questionnaire about knowledge of influenza, total 15 items
2. Questionnaire about the perceived risk of influenza, 15 items

The statistical analysis with mean and standard deviation (S.D.) was done and the result was interpreted using specified criteria. The relationship between knowledge and perceived risk of influenza was analyzed by using statistics to analyze correlations.

In this research study, the researcher clarified the objectives of the study to the participants, explaining the research methods and requesting cooperation from the participants by posting an announcement at the outpatient clinic and explaining the patient the whole procedure individually. The participation in this study depends on the willingness of the sample. The participant must sign consent form in writing. The samples have the right to withdraw from the study at any time, and the information will be used and presented as a whole and will be used for academic purposes only.

Results

From this research, it was found that:

(1) From the general information of research participants, it was evident that the majority of the samples were males between the ages of 20–29 years, single status, most of them had bachelor's degrees.
(2) Knowledge of influenza among outpatient department was at a good level
(3) The awareness of the perceived risk of influenza was at a very good level
(4) It was found that knowledge of influenza has a positive correlation between the perceived risk of influenza among clients in outpatient department of Yalasiriratthanarak hospital (Tables 1–3)

From Table 1, the results of the analysis of knowledge of influenza found that the samples have knowledge of

Table 1 Mean and standard deviation of knowledge of influenza ($n = 384$).

	X	SD	Level
Knowledge of Influenza	10.98	1.80	Good

Table 2 Mean and standard deviation of perceived risk of influenza ($n = 384$).

	X	SD	Level
Perceived Risk of Influenza	38.67	3.13	Very Good

Table 3 The correlation between knowledge of influenza and perceived risk of influenza ($n = 384$).

	Knowledge	Perceived risks
Knowledge	1	0.310**
Perceived risk	0.310**	1

** $P < 0.01$.

influenza with an average score of 10.98 points from a total of 15 points which is considered good level.

From Table 2, the results of the analysis of perceived risk of influenza found that the samples have perceived risk of influenza with an average score of 38.67 points from a total of 45 points which is considered very good level.

From Table 3, data analysis showed that knowledge of influenza is correlated with perceived risk of influenza of 0.310 with statistical significance at the 0.01.

Discussion

Knowledge of influenza was at a good level. The average score is 10.98 out of 15 points, probably because most of the sample group have bachelor's degree. As well as they received public education regarding influenza. Therefore, resulting sample group in the outpatient department service have good knowledge about influenza. In accordance with many other researches it can be said that education affects knowledge.[5,7,8]

The perceived risk of influenza was at a very good level. The average score is 38.67 out of 45 points, probably due to epidemic and public campaigns, including screening for influenza prevention by public health agencies. In addition, most of the sample groups are those who have received education. Therefore, resulting in better risk perception than in other groups.[3–5,7,8]

Knowledge of influenza have a positive correlation between perceived risk of influenza. People with adequate knowledge of the disease prognosis can take care of themselves considering the factors such as knowledge and perceived risk. This will cause improvement of healthcare and good health will be followed.[5,7,8]

Knowledge of influenza have a positive correlation between perceived risk of influenza among clients in outpatient department of Yalasiriratthanarak hospital. Thus, influenza education will increase knowledge and self-efficacy among individuals. Knowledge and public awareness were found to be important factors influencing perceptions of influenza risk and vaccination.

Conflict of interests

The authors declare no conflict of interest.

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