

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

A correlational descriptive study was conducted to describe computer knowledge, attitudes and skills of nurses, and to examine the relationship among the three variables. One hundred and sixty-nine nurses working at People's Hospital were included in this study. Demographic Data Recording Form, NCKQ, and NCSS were used to collect data of demographic and study variables. SPSS for Windows Software was used to data analysis. This chapter presents conclusions of the findings, implications, and recommendations for further nursing research.

Findings and Conclusion

The findings of this study were as follows:

1. The overall computer knowledge of the subjects ranged from 10 to 20 with a mean score of 15.72 ± 2.25 which was at moderate level. For four subparts of computer knowledge, system security knowledge was at high level with

a mean score of 3.67 ± 0.52 ; The CHIS knowledge was at moderate level with a mean score of 5.12 ± 0.89 ; The knowledge regarding limitation of CHIS was also at moderate level with a mean score of 1.68 ± 0.49 ; While basic computer knowledge was at low level with a mean score of 5.24 ± 1.58 .

2. The overall computer attitudes scores ranged from 46 to 78 with a mean score of 61.94 ± 5.61 which was neutral. For the three subparts of computer attitudes, motivation was positive with a mean score of 22.23 ± 2.50 ; Beliefs was neutral with a mean score of 20.96 ± 2.29 ; Satisfaction was also neutral with a mean score of 18.75 ± 2.32 .

3. The overall computer skills scores ranged from 35 to 57 with a mean score of 45.38 ± 3.94 which was at moderate level. For three subparts of computer skills, CHIS skills was at moderate level with a mean score of 21.26 ± 2.56 ; Basic skills was at moderate level with a mean score of 19.10 ± 1.90 ; System security skills was at moderate level with a mean score of 5.02 ± 0.68 .

4. There was no significant difference between nurses receiving formal and those receiving informal computer training in computer knowledge, attitudes and

skills.

5. Computer skills was positively associated with computer knowledge ($r=.2060$, $p=.007$) and Computer attitudes ($r=.2710$, $p=.000$) at low level. However, computer knowledge did not show any significant correlation with computer attitudes ($r=.1081$, $p=.163$).

The conclusions based on the findings of this study were as follows:

1. The computer knowledge of nurses working at People's Hospital was at moderate level.
 2. There was no significant difference in computer knowledge level between nurses receiving formal and those receiving informal computer training.
 3. The computer attitudes of nurses working at People's Hospital were neutral.
 4. There was no significant difference of computer attitudes level between nurses receiving formal and those receiving informal computer training.
 5. The computer skills of nurses working at People's Hospital was at moderate level.
 6. There was no significant difference of computer skills level between nurses receiving formal and those receiving informal computer training.
 7. There were significantly positive relationships
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between computer knowledge and computer skills, and between computer attitudes and computer skills. However, there was no significant relationship between computer knowledge and computer attitudes.

Implications of findings

The findings of this study have important practical implications for nursing administration, education, and research.

Implications for nursing administration

The findings of this study provide information for nursing administrators that the computer knowledge, attitudes and skills of nurses still need to be improved. So, nurse administrators should find the strategies, and plan the ongoing in-service computer training. Nursing administrator's responsibility should included:

1. Encourage all nurses to use computers, correct nurses' misconceptions and resolve actual problems following up computer training, provide appropriate lectures, establish volunteer instructor in each unit.

2. Increase the depth and width of computer knowledge and skills. Emphasis should be on the basic computer knowledge and skills, system security and

limitation of CHIS.

3. Increase nurses' understanding toward computer applications and its impacts to nursing profession. A general introduction of computers in nursing should be added to the computer training content or later lectures. In addition, a hospital-wide campaign of the positive effects of CHIS implementation should be launched. Information about the important functions and position of current CHIS at this hospital, the improved quality and productivity of health care, as well as the future of CHIS should be widely provided.

Implications for nursing education

The results of this study provide implication for nurse educators that computer knowledge and computer attitudes were positively correlated with computer skills. So, it can help nurse educators to planning appropriate computer teaching content and time schedule in order that nurse students' computer knowledge, attitudes and skills can be effectively developed. Orientation and computers in nursing course should provide appropriate information. Teaching may not be enough to increase computer skills, the more hand-on experiences and positive attitudes are necessary. Other factors relating to computer attitudes should be enhanced. Since computer knowledge was not related

to attitudes, providing only knowledge cannot enhance positive attitudes and other relating factors need to be considered.

Implication for nursing research

Findings of the current study provide a baseline information for further research in computer knowledge, attitudes and skills. It may inspire other researchers to further explore other unmeasured aspects regarding computer knowledge, attitudes and skills of nurses, and it can provide a reference for studying these three variables in other fields.

Limitations of the study

This study only measured nurses' computer knowledge, attitudes and skills after one year of CHIS implementation. It could not reflect the change or improvement process of nurses' computer knowledge, attitudes and skills.

Recommendations for further study

A longitudinal study is needed to ascertain the change process of attitudes, as well as computer knowledge and skills get significant improvement over time.

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