

# PhD Nursing Students' Perceptions Towards Clinical Informatics Course

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**Abstract.** This paper aims to investigate PhD nursing students' perceptions regarding a clinical informatics course. Open-ended questionnaires and reviews were used to explore the students' perception of the course. A total of 84.62% (11/13) students responded to the survey. Only four respondents had an understanding of clinical informatics and others did not. All the respondents considered clinical informatics to be a very important and useful course for PhD nursing students.

**Keywords.** Clinical informatics, course, nursing student, perception

## 1. Introduction

With the development of the digital hospital, clinical informatics is embedded in nursing education programs in a variety of ways, including curriculum integration and stand-alone course [1,2]. Students' perceptions are critical for course design and evaluation. It will help to refine the course and adjust content to students' needs. This pilot study collected and analyzed PhD nursing students' perceptions of clinical informatics course at West China School of Medicine, Sichuan University, China. This school is one of the most famous medical schools and a national model of higher medical education in China.

## 2. Methods

We developed an open-ended questions survey in consultation with medical educators and informatics experts. The completion of the questionnaires was voluntary. We surveyed all PhD nursing students (13) joining the course in 2019. The questionnaire includes the following three questions: 1) Talk about your understanding of clinical informatics. 2) What are you hoping to learn from the course? 3) Why do you take clinical informatics as an elective course? The answers to all questionnaires were entered

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into Microsoft office excel 2007, and qualitative content analysis was performed by reviewers.

3. Results

Of the 13 potential participants, 11 respondents replied to all the questionnaires. The survey response rate was 84.62% (11/13). Table 1 shows the characteristics of PhD nursing students. All the respondents answered that clinical informatics is a very useful course for PhD nursing students, so we have elected clinical informatics. Four respondents (4/11, 36.4%) have a better understanding of clinical informatics. Seven respondents (7/11, 33.6%) have an incomplete understanding of clinical informatics. They consider clinical informatics to be equivalent to medical information retrieval. All the respondents (11/11,100%) hope to learn the application of information technology in clinical practices and described what they want to learn through the course. Four themes emerged from the 32 data items mentioned by the interviewees. The most common themes were: information technology in nursing (9/11, 81.8%), data mining (5/11, 45.5%), database (4/11,36.4%), and medical big data (4/11,36.4%).

Table 1. Characteristics of the interviewed PhD nursing students.

Demographics	Number	Mean (SD)
Age	25-41 years	30.83±5.15
Gender		
Female	10	
Male	1	
Length of tenure	0-19 years	5.65±5.84
5<	5	
5-10	4	
>10	2	

4. Conclusion

All the respondents thought clinical informatics is a very useful course for PhD nursing students. They all hope to learn more about clinical informatics. The students' perceptions are also helpful to design and refine the clinical informatics course. Further research will refine the course according to students' perceptions, and evaluate the refined outcome.

References

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