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# DEVELOPING VIDEO MEDIA COMBINED WITH SCENARIOS ON OCCUPATIONAL HEALTH NURSING TOPICS

FOR NURSING STUDENTS

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### INTRODUCTION

Occupational health nursing for fourth year nursing students has been limited in terms of both duration and workplace setting. In order to provide effective learning for students in occupational health nursing, video media combined with scenarios on occupational health nursing has been developed with emphasis on critical thinking and decision-making to solve health problems in the workplace based on exposure to different environmental hazards. Learning by 21st century learning processes and active learning were used as the framework in this study (Figure 1)

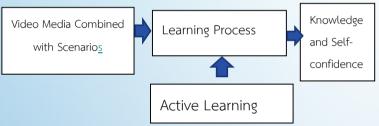


Figure 1 Conceptual Framework

## **MATERIAL AND METHODS**

Step 1: The video media and manual developed were composed of five steps

(Figure 2)

Perform literature
 review and set
 objectives.

Scenario 1 - "Construction Workers" –identify roles of nurses in promoting good occupational health and preventing occupational health problems.

Scenario 2 - "Rubber Pump Plant" identify chemical hazards.

Scenario 3 "Hospital Laundry Room" identify physical and biological hazards

Scenario 4 - "Agriculture" detect chemical and biological hazards

 Compose content and prepare a manual for each episode of the video\_media.

3) Prepare for audio recording and tools required.

4) Continue editing the stories and proceed in line with the objectives set; add narration and sound effects.

5) Have 3 experts and 1 lecturer criticize flaws requiring correction and improvement.



#### MATERIAL AND METHODS

Step 2: Application of Experimental Teaching for Senior Nursing Students

The 155 nursing students (4th year) were recruited to participate in the study. The students were then divided into groups of 7-8 students for teaching activities.

#### Step 3: Evaluation

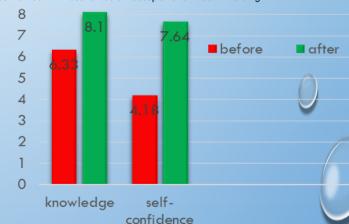
The following questionnaires created by the researcher were used for the teaching evaluation: 1) the questionnaire for evaluating the video media (the alpha = .94), a knowledge scale (the alpha = .71) and a questionnaire for measuring confidence in providing nursing services (the alpha=.68).

#### **Results**

Table 1 - Results of the evaluation of the video media combined with scenarios on occupational health nursing (n=155)

	Evaluation Video Media	Number	Percentage
	Establish learning process		
	Moderate	2	1.29
	Higher	45	29.03
	Highest	108	69.68
	Understanding of nursing occupational roles		
	Moderate	3	1.94
	Higher	58	37.42
	Highest	94	60.64
	Quality of video media and teaching methods		
	Moderate	1	.65
1	Higher	79	50.96
	Highest	75	48.39

Graph 1— Comparison of scores on knowledge and self-confidence in occupational health nursing before and after using the video media compined with scenarios on occupational health nursing.



The students gained knowledge about occupational health nursing before and after learning at 6.33 (S.D. = 2.33), and 8.10 (S.D. = 1.34) respectively. The students had self- confident levels in their ability to provide occupational health services before and after learning at 4.18 (S.D. = 2.20) and 7.64 (S.D. = 1.34), respectively. The students had significant knowledge and self-confidence in occupational health nursing practice (P < .01).



Figure 2 Flow chart of developing video media