

## Chapter 4

### Findings and discussion

#### 1. Findings

For this analysis, all 27 subjects were included.

Table 1 shows the frequency and percentage of age (in years) and experience of being a head nurse in the demographic characteristics of the subjects then does a frequency distribution, percentage and mean score with 88.89 percent being middle-aged. (mean 40.5). Experience being head nurse shows the smallest number (3.7 %) represented.

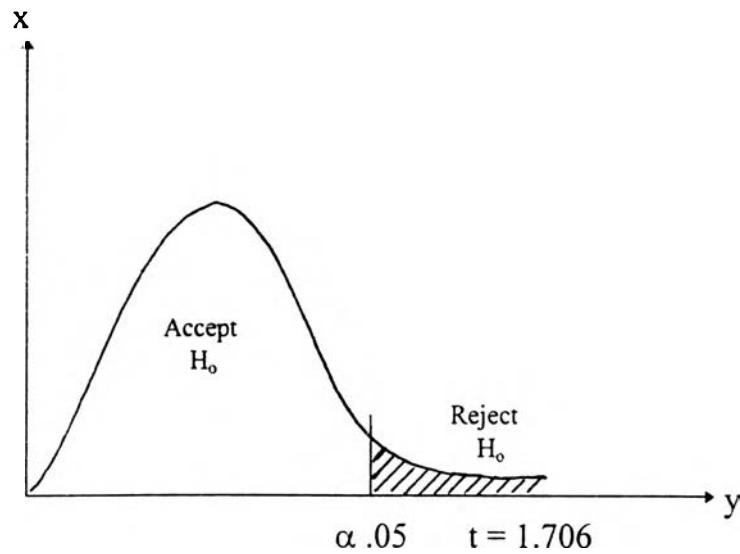
Examination of age and experience being head nurse indicated higher percentage in age (70.3 %) while experience being head nurse for the same range is eight times less (3.7 %). This shows the majority of head nurses are younger in age. The implication is that human resource planning for new head nurses needs to be developed more in the future (Abraham, 1989).

Table 2 shows the t-test values = 3.21 ( $\alpha = .05$ ) at level of 26 = 1.706 (table t). The hypothesis is  $H_0 = \mu_1 = \mu_2$

$$H_1 = \mu_2 > \mu_1 \text{ or } \mu_2 \neq \mu_1$$

After calculation of the scores on the pre and posttests the t-test studied is at point rejected hypothesis  $H_0$  (Figure 2). The finding is that head nurses, after receiving the training in human resource planning, gain more knowledge and activities for discussion during the training session.

**Figure 2 :** Graphic of t-test of the pretest and post-test for knowledge of human resource planning



t-score calculated was at point rejected hypothesis  $H_0$  (t calculated was higher (3.21) than is shown in table t 1.706) meaning that to reject  $H_0$  and accept  $H_1$ . The scores on the pretest were lower than the posttest. The progress after the training workshop shows that head nurses had gained experience and activities for discussion in human resources planning during the training.

## Results

**Table 1** Frequency and percentage of age and experience being head nurses (n = 27).

Demographic characteristic	Frequency	Percentage
Age (in years)		
24 - 35	8	29.63
36 - 45	8	29.63
46 - 55	8	29.63
56 - 60	3	11.11
Experience being head nurse (in years)		
1 - 5	13	48.15
6 - 15	10	37.03
16 - 25	3	11.11
26 - 35	1	3.71

Table 1 shows the frequency of age (in year) of three groups were at same percentage of 29.63. On the contrary, the older group accounted for only 11.11 per cent. In terms of the experience being head nurse, the frequency of age was at percentage of 48.15.

**Table 2** Mean and standard deviation regarding knowledge of human resource planning

Knowledge	Mean	S.D.	t
before the training program	8.18	1.68	3.21*
after the training program	9.14	1.63	

\*  $p < .05$

Table 2 shows the mean and standard deviation of knowledge before the training program at 8.18 and after the training program at 9.14 which is a statistically significant increase at level of .05.

**Table 3** Mean and standard deviation regarding activities for discussion of human resource planning

Activities	Mean	S.D.	Level
1. List the management activities from own ward	3.66	.55	Very good
2. Problem solving for nursing personnel	3.55	.64	Very good
3. Analyse strengths and weaknesses of nurses for reward	3.18	.68	Good
4. List method of reward for nursing personnel	3.33	.83	Good
5. Individual written report : nursing personnel planning.	3.00	.55	Good
Total	3.34	.26	Good

Table 3 shows the mean and standard deviation regarding the activities for discussion of human resource planning, 3 activities were at good level and only 2 activities were at very good level. The total of arithmetic mean was 3.34 which is at good level.

**Table 4** Mean and standard deviation regarding training evaluation

Activities	Mean	S.D.	Level
1. Lecturer's performance	3.33	.48	Good
2. Training workshops :			
<b>Day 1 :</b>			
2.1 Policy for human resource development	3.37	.68	Good
2.2 Concept and process of nursing administration	3.29	.46	Good
2.3 Slide show : Ward management	2.85	.71	Good
2.4 Discussion : Listing management activities	3.29	.54	Good
2.5 Problem solving for nursing personnel	3.22	.80	Good
<b>Day 2 :</b>			
2.6 Nursing personnel planning	3.44	.50	Good
2.7 SWOT analysis	3.37	.56	Good
2.8 Analysing strengths and weaknesses of nurses for reward	3.44	.67	Good

Table 4 (cont'd)

Activities	Mean	S.D.	Level
<b>Day 3 :</b>			
2.9 Discussion : Method for rewarding nursing personnel	3.44	.50	Good
2.10 Individual written report : Planning nursing personnel activities	3.40	.50	Good
2.11 Pre and post-test	3.44	.50	Good
2.12 Application of learning experience to real situation	3.22	.42	Good
2.13 Schedule time	3.44	.50	Good
2.14 Location/conference room	2.92	.72	Good
2.15 Coffee - break	2.62	.88	Good
<b>Total</b>	<b>3.24</b>	<b>.27</b>	<b>Good</b>

Table 4 shows the total arithmetic mean was at 3.24 which is at good level. The lowest mean was 2.85 for the slide show.

**Table 5** Index of powerty (p) and discrimination (r) of the test  
for knowledge of human resource planning

Item	Pretest	
	p	r
1	.92 *	.14 **
2	.78	.42
3	.42	.28
4	.42	.28
5	.71	.57
6	.57	-.57 **
7	.50	1.00 **
8	1.00 *	0.00 **
9	.35	.42
10	.21	.42
11	1.00 *	0.00 **
12	.71	.28
13	.92 *	.14 **
14	.14 *	-.28 **
15	.64	.71

p\* = beyond (.20 - .80)

r\*\* = less than (.20)

Table 5 shows that 7 items (1, 6, 7, 8, 11, 13 and 14) of knowledge about human resource planning on the test need to be improved. These items were reviewed by replacing the choices for item 1. The other items were reviewed for language and wording.



## Discussion

The knowledge of head nurses on human resource planning before and after the training program, as shown in table 2, increased statistically.

Table 3, the activities for discussion in relation to human resource planning, shows that head nurses gained skill during the discussion session at good level.

The individual evaluations of the training program shown in table 4 are all at good level. The head nurses recommended that the slide show take less time.

The index of powerty (p) and discrimination (r) of the “Test of Knowledge for Human Resource Planning” shown in Table 5, using Kuder Richardson (KR-21) was revised at the advice of all eight experts as follows:

number 1 = 0.14  
number 6 = -0.57  
number 7 = 1.00  
number 8 = 0.00  
number 11 = 0.00  
number 13 = 0.14  
number 14 = -0.28

Item 1 was revised by changing the answer choices while the other items were reviewed for language and wording accordingly.