Explore the Knowledge of Nursing Administrators on Current Nursing Work Environment Issues in Taiwan

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Purpose

The purposes of this study aimed at assessing the entry level nursing administrators' knowledge of the dilemma of current nursing work environment and how individual characteristics affect their level of knowledge.

Methods

This study was designed to be a cross sectional study. After two research team discussions and two rounds of expert focus group discussion, all the dilemmas which entry level nursing administrators are facing in current nursing work environment were laid out. Experts of this field were engaged to devise test questions for relevant issues. Every version of test has twenty questions. The numbers of questions pertaining to each issue are apportioned according their importance. Of the twenty, there are four questions for flexible scheduling and scheduling rules-maximization of scheduling satisfaction, five for nursing models and job design - including skill mix care, three for effective handover, recording by importance and computerization, five for high performance leadership - pursing the balance between work and life for nurses, and three for planned cross training and job rotation in line with career development. After expert consultation, we devised 5 sets of tests for the 22 symposiums. Every set of test was analyzed for its level of difficulty and capability of differentiation. All of their difficulty range between 0.5 and 0.8, which means moderate difficulty. And the capability of differentiation ranges from 0.19 to 0.29. Only the fifth set is slightly lower than 0.19 and the other four sets are all greater than 0.2, which means acceptable capability of differentiation. Paper and pencil tests were administered before each symposium and the five tests were used in cycle to ensure fairness. 1,829 persons received the test in total.

Results

The overall average is 65.37. Passing score is set at 60. As such, 1,384 persons passed with a pass rate of 75.5%. 66.86% of the questions were correctly answered. The highest correct answer rate is for the issue of planned cross training and job rotation in line with career development (87.13%), followed by flexible scheduling and scheduling rules - maximization of scheduling satisfaction at 77.35%, high performance leadership - pursing the balance between work and life for nurses at 70.04%, effective handover, recording by importance and computerization at 56.20%. The issue of nursing models and job design - including skill mix care has the lowest correct rate at 43.56%. According to ANOVA and post hoc analyses, the level of knowledge of the dilemma of current nursing work environment significantly differs among regions in which the hospital is located. In the issues of planned cross training and job rotation in line with career development and effective handover, recording by importance and computerization, the eastern region is superior to the northern, central and southern. The levels of knowledge of planned cross training and job rotation in line with career development and high performance leadership - pursing the balance between work and life for nurses significantly differ among hospital accreditation levels. Medical centers are better than regional and district hospitals. The levels of knowledge of high performance leadership - pursing the balance between work and life for nurses and nursing models and job design - including skill mix care significantly differ among educational levels. Graduate school level is better than two year college and bachelor.

Table1 The Knowledge of Nursing Administrators on Current Nursing Work Environment Issues

N=1834

Nursing environment current issues	score	SD	correct rate
1. planned cross training and job rotation in line with career development(3 items；total score: 15)	13.07	3.22	87.13
2.flexible scheduling and scheduling rules - maximization of scheduling satisfaction(4 items；total score: 20)	15.47	4.30	77.35
3.high performance leadership - pursing the balance between work and life for nurses (5 items；total score: 25)	17.51	5.33	70.04
4.effective handover, recording by importance and computerization (3 items；total score: 15)	8.43	3.91	56.20
5.The issue of nursing models and job design - including skill mix care (5 items；total score: 25)	10.89	6.08	43.56
Total	65.37	12.46	66.86

Conclusion

The knowledge of entry level nursing administrators in Taiwan on the dilemma of current nursing work environment has barely made the passing grade. There is plenty of room for improvement. The on the job trainings of future entry level nursing administrators should strengthen the knowledge and understanding of nursing models and job design, and emphasize the issue of effective handover, recording by importance and computerization in the hope of increasing the knowledge of nursing administrators on the dilemma of current nursing work environment and improving nursing work environment. We hope the findings of this study can provide references for future education and training so as to elevate the leading and management ability of nursing administrators and improve nurses' retention intention.

Table2 ANOVA and post hoc analyses

N=1834

Basic properties	Number (percentage)	flexible scheduling and scheduling rules - maximization of scheduling			The issue of nursing models and job design - including skill mix care			effective handover, recording by importance and computerization			high performance leadership - pursing the balance between work and life for nurses			planned cross training and job rotation in line with career development		
		mean	p	Post hoc	mean	p	Post hoc	mean	p	Post hoc	mean	p	Post hoc	mean	p	Post hoc
Institutional area		77.36	.002	middle>south	43.58	.000	middle>south>north>eastern	56.17	.019	eastern > middle	70.03	.000	middle >south>north>eastern	87.13	.000	north> eastern> eastern
North District	644(35.2)	78.18			40.59			55.12			68.11			85.97			
Middle District	468(25.6)	79.75			49.83			54.56			74.66			87.04			
South District	530(29.0)	75.38			45.74			57.17			70.83			86.42			
Eastern District	187(10.2)	74.20			32.09			60.96			62.78			93.40			
Institutional level		77.40			43.22	.000	Medical center >Regional Hospital Medical center > District hospital	56.01			69.75	.000	Medical center >Regional Hospital > District hospital	87.12		
Medical center	376(20.6)	76.13			49.57			57.62			74.52			86.52			
Regional Hospital	870(47.6)	77.61			42.30			55.40			67.77			86.28			
District hospital	468(25.5)	78.10			40.00			55.63			69.27			89.25			
Specialist hospital	56(3.1)	76.79			41.79			57.74			72.50			86.31			
Missing	59(3.2)															
Unit		77.29			43.28	.002	General ward > Psychiatric ward	56.20			69.68			87.13		
Nursing Department	325(17.8)	76.54			42.40			56.72			69.05			87.28			
Outpatient	89(4.9)	76.12			46.52			56.55			70.56			87.27			
Emergency	95(5.2)	77.89			39.16			57.54			69.05			89.82			
Intensive care unit	243(13.3)	78.29			44.61			57.06			71.19			84.50			
General ward	569(31.1)	76.89			45.41			56.65			69.84			86.53			
Psychiatric ward	114(6.2)	73.25			35.96			50.88			68.77			88.30			
other	319(17.4)	79.62			42.32			55.59			69.15			88.82			
Missing	75(4.1)															
position		77.46			43.67			56.00			69.83	.040	Vic-head nurse >leader	86.97		
Leader	446(24.4)	76.35			73.14			56.73			67.85			86.32			
Associate head nurse	351(19.2)	77.42			45.64			56.60			72.65			86.23			
Head nurse	794(43.4)	77.83			43.78			55.46			69.65			87.83			
Supervisor/vice-Director/Director	146(8.0)	78.94			40.00			55.25			70.14			86.07			
Missing	92(5.0)															
Education level		77.39			43.15	.000	master> Bachelor	56.22			69.62	.041	master> college	87.06		
College	238(13.0)	76.26			41.85			57.28			66.81			87.82			
Bachelor	1,118(61.1)	77.82			41.79			55.64			69.45			87.42			
Master	411(22.5)	76.82			47.59			57.18			71.73			85.64			
Missing	62(3.4)															

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