Effect of presence and distance teaching methods on nurses' knowledge about pressure ulcer

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INTRODUCTION

- There is no consensus about what kind of education would be better to increase nurses' knowledge of Pressure Ulcer (PU)[1,2,3].

- Thus, this study aimed to verify the effect of on-site and distance teaching methods on knowledge of nurses about PU.

METHODOLOGY

- The experimental research with posttest control group was performed at a large-sized public hospital in Brazil, from January to April 2012.

- The sample of 43 nurses was randomly divided into Control Group (n=20), who had on-site classes, and Experimental Group (n=23), with distance learning.

- The research project was approved by the Ethics Committee.

- For data collection, Pieper and Moot's (1995) knowledge test was applied.

RESULTS

Table 1 –Demographic characteristics in both groups.

Variable	Teaching Method								p
	On-site (n=20)			Distance (n=23)			Total (n=43)		
	n	%	$\bar{x}(dp)$	n	%	$\bar{x}(dp)$	n	%	
Sex									
Male	1	5,0		7	30,4		8	18,6	**0,050**[1]
Female	19	95,0		16	69,6		35	81,4	
Total	***20***	***100,0***		***23***	***100,0***		***43***	***100,0***	
Age			36,4(10,4)			31,2(7,3)			0,102[2]

[1]Fischer Test; [2]Mann-Whitney Test

$\bar{x}$ - average sd - standard deviation

RESULTS

Table 2 –Internet and computer use in both groups.

Variable	Teaching Methods						P
	On-site (n=20)		Distance (n=23)		Total (n=43)		
	n	%	n	%	n	%	
Frequency internet use							
Daily use	12	60,0	17	73,9	29	67,4	0,331[3]
Don´t daily use	8	40,0	6	26,1	14	32,6	
Total	***20***	***100,0***	***23***	***100,0***	***43***	***100,0***	
Frequency computer use							
Daily use	12	60,0	18	78,3	30	69,8	0,193[3]
Don´t daily use	8	40,0	5	21,7	13	30,2	
Total	***20***	***100,0***	***23***	***100,0***	***43***	***100,0***	

[3]Chi-square Test

RESULTS

Table 2 – Comparison of the average knowledge on PU after training with on-site and distance teaching.

Knowledge on PU after training			
Teaching method	$\bar{x}$	sd	***p value***
On-site	34,0	3,3	**0,019**[4]
Distance	36,2	2,7	

$\bar{x}$ - average sd - standard deviation [4]t Test

The mean score on the knowledge test for the on-site learning participants was 34.0 (sd=3.3) and for participants of the distance learning was 36.2 (sd=2.7). The mean difference between groups was statistically significant (*p=0.019*)

DISCUSSION

- The effect of distance education methods on nurses' knowledge of PU was higher than the one of on-site teaching. Distance Education (DE) seems to be an effective strategy for lifelong learning as it is practical, interactive and enable nurses who are in clinical practice to decide on the best time and place to access the content[4.5].

FINAL CONSIDERATIONS

- Improving nurses' knowledge of PU is essential to promote nursing interventions pertinent to the Guidelines for prevention and treatment of PU.

REFERENCES

- [1] COSTA J.B.; PERES, H.H.C.; ROGENSKI, N.M.B.; BAPTISTA, C.M.C. Proposta educacional on-line sobre úlcera por pressão para alunos e profissionais de enfermagem. **Acta Paul Enferm**, v.22, n.5, p.607-11, 2009.
- [2] COX, J.R; WYNEN, S; COX, E.V.J; ROCHE, S; WYNEN, E.V. The effects of various instructional methods on retention of knowledge about pressure ulcer among critical care and medical-surgical nurses. **The journal of continuing education in nursing**, v.42, n.2, p.71-8, fev, 2011.
- [3] JONES, M.L. E-learning in wound care: developing pressure ulcer prevention education. **Br J Nurs,** v.16, n.15, p. 26-31, 2007.
- [4] HORIUCHI, S.; YAJU, Y.; KOYO, M.; SAKYO, Y.; NAKAYAMA, K. Evaluation of a
- web-based graduate continuing nursing education program in Japan: A randomized controlled trial. **Nurse Education Today**, v.29, p.140-149, 2009.
- [5] MOORE, M.G.; KEARSLEY, G. **Educação a distância:** uma visão integrada. Tradução Roberto Galman. São Paulo: Thomson Learning, 2007.

THANKS!

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