Title:

Predictors of Quality of Life in Dyspneic Patients with Advanced Cancer

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Session Title:

Rising Stars of Nursing Invited Posters - Group 1

Slot (superslotted):

RSG STR 1: Thursday, September 25, 2014: 9:45 AM-10:30 AM

Slot (superslotted):

RSG STR 1: Thursday, September 25, 2014: 2:30 PM-3:15 PM

Keywords:

Advanced cancer, Dyspnea and Research

References:

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Gift, A., & Suppe, F. (1997). The middle-range theory of unpleasant symptoms: an update. Advances in Nursing Science, 19(3), 14-27. McMillan, S. C., & Mahon, M. (1994). Measuring Quality of Life in Hospice Patients Using a Newly Developed Hospice Quality of Life Index, Quality of Life Research, 3(6), 437-447. doi: 10.2307/4035312 Parshall, M. B., Schwartzstein, R. M., Adams, L., Banzett, R. B., Manning, H. L., Bourbeau, J., et al. (2012). An official American Thoracic Society statement: update on the mechanisms, assessment, and management of dyspnea. American journal of respiratory and critical care medicine, 185(4), 435-452. Portenoy, R. K., Thaler, H. T., Kornblith, A. B., McCarthy Lepore, J., Friedlander-Klar, H., Kiyasu, E., et al. (1994). The Memorial Symptom Assessment Scale: an instrument for the evaluation of symptom prevalence, characteristics and distress. European Journal of Cancer, 30(9), 1326-1336. Power, M., Bullinger, M., & Harper, A. (1999). The World Health Organization WHOQOL-100: Tests of the universality of quality of life in 15 different cultural groups worldwide. Health Psychology, 18(5), 495-505. doi: 10.1037/0278-6133.18.5.495 Reddy, S. K., Parsons, H. A., Elsayem, A., Palmer, J. L., & Bruera, E. (2009). Characteristics and correlates of dyspnea in patients with advanced cancer. Journal of palliative medicine, 12(1), 29-36. Rhodes, V. A., & Watson, P. M. (1987). Symptom distress—the concept: past and present. Paper presented at the Seminars in Oncology Nursing. Siegel, R., Naishadham, D., & Jemal, A. (2013). Cancer statistics, 2013. CA: A Cancer Journal for Clinicians, 63(1), 11-30. doi: 10.3322/caac.21166 Tanaka, K., Akechi, T., Okuyama, T., Nishiwaki, Y., & Uchitomi, Y. (2002). Prevalence and Screening of Dyspnea Interfering with Daily Life Activities in Ambulatory Patients with Advanced Lung Cancer. Journal of Pain and Symptom Management, 23(6), 484-489. doi: http://dx.doi.org/10.1016/S0885-3924(02)00394-9 Twaddle, M. L., Maxwell, T. L., Cassel, J. B., Liao, S., Coyne, P. J., Usher, B. M., et al. (2007). Palliative Care Benchmarks from Academic Medical Centers. [Article]. Journal of palliative medicine, 10(1), 86-98. doi: 10.1089/jpm.2006.0048 Velikova, G., Coens, C., Efficace, F., Greimel, E., Groenvold, M., Johnson, C., et al. (2012). Health-Related Quality of Life in EORTC clinical trials — 30 years of progress from methodological developments to making a real impact on oncology practice. [Article]. EJC Supplements, 10, 141-149. doi: 10.1016/s1359-6349(12)70023-x Yang, P., Cheville, A. L., Wampfler, J. A., Garces, Y. I., Jatoi, A., Clark, M. M., et al. (2012). Quality of life and symptom burden among long term lung cancer survivors: changing and adapting. Journal of thoracic oncology: official publication of the International Association for the Study of Lung Cancer, 7(1), 64.

Learning Activity:

LEARNI NG OBJECTI VES	EXPAN DED CONTE NT OUTLIN E	TIME ALLOT TED	FACULTY/SPE AKER	TEACHING/LEA RNING METHOD	EVALUATION/FE EDBACK
Example	Example	Example	Example	Example	Example
selected definition of the term,	Definitio ns of "curricul um" Course of study Arrange ments of instructio nal materials	20 minutes	Name, Credentials	Lecture PowerPoint presentation Participant feedback	Group discussion: What does cultural training mean to you?

	The subject matter that is taught Cultural "training" Planned engagem ent of learners				
Identify the four symptoms which occur with dyspnea in patients with advanced cancer		10 minutes	Sara Tinsley MS, ARNP, AOCN	Poster with discussion	Group discussion of symptoms and their effect on quality of life
Describe how symptom intensity and distress affected quality of life scores for dyspneic Hospice patients	Review with learners the statistical findings for symptom intensity and distress, and influence on Hospice quality of life scores	10 minutes	Sara Tinsley MS, ARNP, AOCN	Poster with discussion	Individual and group review of statistical analysis of data illustrating symptom clusters which predict for inferior quality of life scores

Review	Discuss	10	Sara Tinsley	Poster with	Individual and group
findings	contributi	minutes	MS, ARNP,	discussion	discussion of fatigue,
for	ng factors		AOCN		and methods for
incidence	for				improving fatigue in
of fatigue	fatigue				the Hospice setting
in selected	with				
sample	learners				

Abstract Text:

Uncontrolled dyspnea is frightening for patients and adversely affects quality of life. It is disabling and interferes with daily activities and limits valuable time spent with family and friends. Dyspnea and related symptoms in advanced cancer are not adequately treated due to limited research and understanding of the total symptom experience. Dyspnea is a complex, distressing symptom in advanced cancer which occurs with other symptoms and smothers QOL.

The purpose of this study was to identify symptoms which correlate with dyspnea in advanced cancer patients, and how the dyspnea symptom cluster predicted quality of life. A descriptive, predictive correlational design was used to identify the symptoms that correlated with dyspnea, and predicted QOL. The study included 407 Hospice patients with dyspnea. The most frequently reported symptoms reported with dyspnea were lack of energy (91%), dry mouth (74%), pain (72%), and lack of appetite (64%). Other commonly reported symptoms with dyspnea included drowsiness, cough, and constipation. Additional symptoms which occurred with dyspnea in more than half of the patients included drowsiness (62%) and cough (57%). The dependent variable for the regression analysis was quality of life, measured by the Hospice Quality of Life Index. A subscale of the Memorial Symptom Assessment Scale was used to measure symptom intensity and distress. In addition, age and functional status were added into the regression analysis from the demographic data.

Shortness of breath occurred in all of the patients from this subset of hospice patients. Lack of energy occurred most frequently with shortness of breath, and was the most distressing of all measured symptoms. Pain was the next most distressing symptom which emerged with shortness of breath. Symptom intensity was reported for all variables. Sexual problems had the highest reported intensity but were only reported in 15% of patients. Several symptoms were rated as 2 or greater, corresponding to somewhat severe intensity. The most frequently reported symptoms with somewhat severe intensities for dyspneic patients were lack of energy, dry mouth, pain, and lack of appetite.

Prediction of QOL from correlates of dyspnea at the univariate and multivariate level were computed. At the univariate level, distress from fatigue, dry mouth, and pain were significantly related to QOL. The relationship was negative, which indicated that as distress from pain, fatigue, and dry mouth increases, QOL declines. Dyspnea and fatigue severity were also significant negative predictors of QOL.

For the multivariate analysis, all five predictors were entered into the regression analysis simultaneously. The combined dimensions of symptoms accounted for 31% of the variance in QOL scores. Distress from fatigue and dry mouth were significant predictors of QOL (p<.001). Pain distress and dyspnea and fatigue severity were also significant predictors of QOL (p<.05).

Distressing symptoms associated with dyspnea were the significant predictors of QOL. Fatigue, dry mouth, and pain cluster with dyspnea and are negatively correlated with QOL. Distress from fatigue is a stronger predictor than intensity from fatigue. Higher symptom intensity and distress are linked with lower QOL. In order to improve QOL, interventions should be focused on managing the symptom, and the meaning of the symptom to the patient, which can result in distress. This is best accomplished through multidisciplinary efforts, which can be provided in the hospice setting.