



Perceived autonomy supportiveness provided by nurses and anxiety in sarcoma patients

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Introduction

Sarcomas are a rare type of solid cancer (bone or soft tissue cancer) associated with several negative psychological outcomes (Paredes, Canavarro & Simões, 2011).

Screening patients for distress is important to identify potential psychosocial problems and ensure adequate treatment (Pirl et al., 2014). The time of screening should occur at the time of diagnosis and at appropriate time points after the first clinical visit (Pirl et al., 2014).

Oncology nurses have an important role in providing support to sarcoma patients (Spears, 2008). According to Self-Determination Theory (SDT) receiving autonomy support predicts psychological health (Deci, La Guardia, Moller, Scheinar & Ryan, 2006) and physical health (Ng et al., 2012).

Objectives

- This is a longitudinal study aimed:
- ✓ To characterize the level of anxiety in patients with sarcoma during three phases of treatment;
 - ✓ To characterize the perceived autonomy supportiveness provided by nurses during two phases of treatment;
 - ✓ To explore socio-demographic and clinical determinants of the perceived autonomy supportiveness provided by nurses and the level of anxiety in patients with sarcoma during treatment;
 - ✓ To study the association between the perceived autonomy supportiveness provided by nurses and levels of anxiety in patients with sarcoma during treatment.

Methods

Participants		Material
24 Portuguese adult patients of both sexes, mean age of 41 (SD = 16,8), diagnosed with sarcoma:		- Sociodemographic and Clinical Questionnaire
• Marital status: Married/co-habiting - 12 patients (50%); Divorced/single/widowed - 12 (50%)		- Portuguese version of the Health Care Climate Questionnaire (HCCQ) – Lemos & Garret (2010) – six itens, scored in a Likert scale 1-7. The total score ranges from 6 – 42. Higher scores express more autonomous support.
• Education: Less than high school: 12 (50%); High school or more: 12 (50%)		- Portuguese version of the Hospital Anxiety and Depression Scale (HADS) – Pais-Ribeiro et al. (2007) - 14 items, on a scale of 0–3 (3 indicates higher symptom frequencies); Scores for each subscale (anxiety and depression) range from 0 to 21 with scores categorized as follows: normal 0–7, mild 8–10, moderate 11–14, and severe 15–21. For this study, we only used the anxiety subscale.
• Employed: 12 patients = 50%		
• Tumour type: soft tissue (14 patients); bone (9 patients)		
• Treatment: Surgery (for the large majority - 71%), complemented with Chemotherapy and/or radiotherapy		

Results

Characterization the level of anxiety and the perceived autonomy supportiveness provided by nurses during the course of treatment

Patients were assessed in the beginning of treatment (Ph1) and 4 (Ph2) and 9 (Ph3) months after, and the results show:

- ✓ a decrease in levels of anxiety;
- ✓ a positive perception of the support provided by nurses at 4 and 9 months.

		Ph1	Ph2	Ph3
HADS		ANXIETY		
		n (%)	n (%)	n (%)
	Normal	12 (50)	13 (54,2)	15 (62,5)
	Mild	8 (33,3)	7 (29,2)	5 (20,8)
	Moderate	4 (16,7)	3 (12,5)	4 (16,7)
	Severe	0	0	0
HCCQ		AUTONOMY SUPPORT		
Wilcoxon Test: Z = - 0,44; ns			M (SD)	M (SD)
			36,7 (4,86)	36,0 (5,63)

Socio-demographic and clinical determinants of the perceived autonomy supportiveness provided by nurses and the level of anxiety during treatment

Overall, younger patients, with more education and without a partner, reported:

- ✓ more autonomous perceived support provided by nurses;
- ✓ lower levels of anxiety.

Association between the perceived autonomy supportiveness provided by nurses and levels of anxiety during treatment

The results evidence that a more autonomous perceived treatment climate is associated with lower levels of anxiety, nine months after the beginning of treatment.

		HADS Anxiety	
		Ph2	Ph3
HCCQ Autonomy support	Ph2	ns	- 0,42*
	Ph3	ns	- 0,61**

* p < 0,05; **p < 0,01

Conclusions

- ✓ Although many patients with sarcoma don’t suffer from clinical levels of anxiety in different phases of illness, a significant group present mild to moderate levels of anxiety and would benefit from psychological interventions, in order to help decrease distress during treatments.
- ✓ The study emphasizes the importance of the autonomous support provided by nurses in the disease management process, and the need to identify the most vulnerable patients in terms of emotional distress, in order to plan psychosocial interventions to promote patients’ wellbeing.
- ✓ Oncology nurses have an opportunity to address significant distress in a timely manner and to provide supportive care interventions.

References:

Deci, E. L., La Guardia, J. G., Moller, A. C., Scheiner, M. J., & Ryan, R. M. (2006). On the benefits of giving as well as receiving autonomy support: mutuality in close friendships. *Personality & Social Psychology Bulletin*, 32(3), 313-327.

Lemos, M., & Garrett, S. (2013). HCCQ: H-D Questionário de Perceção do Ambiente Terapêutico: Saúde - Diabetes. In Marina S. Lemos, Ana M. Gamelas, & José A. Lima (Eds). *Research Instruments Developed, Adapted or Used by the Developmental, Educational and Clinical Research with Children and Adolescents Group*. Universidade do Porto, Faculdade de Psicologia e de Ciências da Educação, Porto.

Ng, J. Y., Ntoumanis, N., Thøgersen-Ntoumani, C., Deci, E. L., Ryan, R. M., Duda, J. L., & Williams, G. C. (2012). Self-determination theory applied to health contexts: A meta-analysis. *Perspectives On Psychological Science*, 7(4), 325-340. doi:10.1177/1745691612447309

Pais-Ribeiro, J., Silva, I., Ferreira, T., Martins, A., Meneses, R., & Baltar, M. (2007). Validation study of a Portuguese version of the Hospital Anxiety and Depression Scale. *Psychol Health Med*, 12(2), 225-235; quiz 235-227. doi: 10.1080/13548500500524088

Paredes, T., Canavarro, M. C., & Simões, M. R. (2011). Anxiety and depression in sarcoma patients: emotional adjustment and its determinants in the different phases of disease. *European Journal of Oncology Nursing*, 15(1), 73-79. doi: 10.1016/j.ejon.2010.06.004

Pirl, W. F., Fann, J. R., Greer, J. A., Braun, I., Deshields, T., Fulcher, C., & ... Bardwell, W. A. (2014). Recommendations for the implementation of distress screening programs in cancer centers: Report from the American Psychosocial Oncology Society (APOS), Association of Oncology Social Work (AOSW), and Oncology Nursing Society (ONS) joint task force. *Cancer* (0008543X), 120(19), 2946-2954. doi:10.1002/cncr.28750

Spears, J. (2008). Emotional support given by ward-based nurses to sarcoma patients. *European Journal of Oncology Nursing*, 12(4), 334-341. doi: 10.1016/j.ejon.2008.03.001

Social support and depression in sarcoma patients, in different phases of disease

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Introduction

Sarcomas are rare malignant tumours affecting patients, both physically and emotionally. Emotional distress among cancer and sarcoma patients is common (Bultz et al., 2011; Paredes, Pereira, Simões & Canavarro, 2012), and evidence from recent research recommends screening for distress at various time points from a cancer diagnosis (Pirl et al., 2014).

A large number of patients experience depressive symptoms after receiving a cancer diagnosis and during its treatment (Segall, DuHamel, & Paul, 2010). Among other factors, previous research identified social support as a variable associated with psychological adjustment of cancer patients (Boinon et al, 2014), namely with emotional health.

Social support is frequently defined as a multidimensional construct, and according to Matos and Ferreira (1999) it includes the following dimensions: informative support (provision of information and advice), emotional support (reassurance and ventilation of emotions) and instrumental support (tangible help as tasks performance).

Objective

To examine the levels of depression and its association with social support, in different phases of disease:

- During first consultation - beginning of treatment (Ph1)
- Four months after (Ph2)
- Nine months after (Ph3)

Method

Participants

Patients with sarcoma (N=24) were recruited from two Portuguese oncological units. The majority of patients were young adults (M=41; SD=16,8).

		<i>n</i>	%
Gender	Female	10	38,3%
	Male	14	41,7%
Marital status	Married	12	50%
	Not married	12	50%
Children	With children	12	50%
	Without children	12	50%
Cohabitation	Family	23	95,8%
	Alone	1	4,2%
Tumour Type	Soft tissue	15	62,5%
	Bone	9	37,5%

Material

- Sociodemographic and Clinical Questionnaire;
- Portuguese version of The Social Support Scale (Matos & Ferreira, 1999) - 16 items assess the intensity of social support received patients on a 5-points Likert scale. Three subscales for each of the three dimensions of social support: **informative** (six items, $\alpha = 0,74$), **emotional** (five items, $\alpha = 0,72$), **instrumental** (five items, $\alpha = 0,63$). Higher scores in each subscale and in the global score suggest higher perceived support.
- Portuguese version of The Hospital Anxiety and Depression Scale (Pais-Ribeiro et al., 2007). This 14-item scale is used to evaluate anxiety and depression. It consists of two subscales, which are scored separately: anxiety (seven items, $\alpha = 0,84$) and depression (seven items, $\alpha = 0,84$). Each item is formulated on a 4-points Likert scale. Higher scores in each subscale suggest higher severity of symptoms of anxiety or depression. For this study, we only used the depression subscale.

Results

Some patients reported mild levels of depression during the course of treatment.

		Ph1 n (%)	Ph2 n (%)	Ph3 n (%)
Depression	Normal	18 (75)	18 (75)	18 (75)
	Mild	6 (25)	3 (12,5)	5 (20,8)
	Moderate	0	2 (8,3)	0
	Severe	0	0	0

Participants reported a high level of social support (total score). In the subscale related to instrumental support, significant differences were found between the three phases ($X^2 = 6,10$; $p = 0,04$).

		Ph1 M (SD)	Ph2 M (SD)	Ph3 M (SD)	Friedman Test
Social Support	Informative	4,15 (0,44)	4,28 (0,54)	4,15 (0,53)	$X^2=0,13$; ns
	Emotional	3,97 (0,62)	4,40 (0,67)	4,15 (0,53)	$X^2=2,35$; ns
	Instrumental	3,83 (0,93)	4,30 (0,82)	3,98 (0,90)	$X^2=6,10$; $p=0,04$
	Global score	4,33 (0,51)	4,46 (0,70)	4,29 (0,75)	$X^2=0,28$; ns

Significant negative associations were found between social support and depression symptoms in Ph2, more specifically in the informative support dimension ($R_s=0,60$; $p < 0,01$) and in the emotional support dimension ($R_s=0,46$; $p < 0,01$).

<i>R Spearman</i>			Depression		
			Ph1	Ph2	Ph3
Social Support	Informative	Ph1	ns		
		Ph2		-0,60**	
		Ph3			ns
	Emotional	Ph1	ns		
		Ph2		-0,46**	
		Ph3			ns
	Instrumental	Ph1	ns		
		Ph2		ns	
		Ph3			ns

** $p < 0,01$

Conclusion

In the different phases of the disease, a minority of sarcoma patients becomes clinically depressed and a significant number of patients experience some depressive symptoms. Overall, social support is associated with lower levels of depression.

Oncology nurses have an opportunity to address significant distress in a timely manner and can identify patients who need assessment and support, during treatment trajectory, in order to program interventions.

The implementation of programs aimed to promote psychosocial adaptation should enhance social support, especially in its informative and emotional dimensions.

References:

- Boinon, D., Sultan, S., Charles, C., Stulz, A., Guillemeau, C., Delaloge, S., & Dauchy, S. (2014). Changes in psychological adjustment over the course of treatment for breast cancer: the predictive role of social sharing and social support. *Psychooncology*, 23(3), 291-298. doi: 10.1002/pon.3420
- Bultz, B. D., Groff, S. L., Fitch, M., Blais, M. C., Howes, J., Levy, K., & Mayer, C. (2011). Implementing screening for distress, the 6th vital sign: a Canadian strategy for changing practice. *Psycho-Oncology*, 20(5), 463-469
- Matos, A.P., & Ferreira, A. (2000). Desenvolvimento duma escala de apoio social: alguns dados sobre a sua fiabilidade. *Psiquiatria Clínica*, 21(3), 243-253.
- Pais-Ribeiro, J., Silva, I., Ferreira, T., Martins, A., Meneses, R., & Baltar, M. (2007). Validation study of a Portuguese version of the Hospital Anxiety and Depression Scale. *Psychol Health Med*, 12(2), 225-235; quiz 235-227. doi: 10.1080/13548500500524088
- Pirl, W. F., Fann, J. R., Greer, J. A., Braun, I., Deshields, T., Fulcher, C., & ... Bardwell, W. A. (2014). Recommendations for the implementation of distress screening programs in cancer centers: Report from the American Psychosocial Oncology Society (APOS), Association of Oncology Social Work (AOSW), and Oncology Nursing Society (ONS) joint task force. *Cancer (0008543X)*, 120(19), 2946-2954. doi:10.1002/cncr.28750
- Paredes, T. T., Pereira, M. M., Simões, M. R., & Canavarro, M. C. (2012). A longitudinal study on emotional adjustment of sarcoma patients: the determinant role of demographic, clinical and coping variables. *European Journal Of Cancer Care*, 21(1), 41-51. doi:10.1111/j.1365-2354.2011.01269.x
- Segall, D., DuHamel, K., & Paul, L. (2010). Psychological adaptation, coping, and distress in adult-onset soft tissue sarcomas. *Electronic sarcoma update newsletter*, 7(4).