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Alexithymia, Empathy and Burn-out Amongst Radiation Oncologists. the Pro Bono Survey

This is the author's manuscript

Original Citation:

Availability:

This version is available <http://hdl.handle.net/2318/1743450> since 2020-07-08T23:34:43Z

Published version:

DOI:10.1016/j.ijrobp.2019.06.421

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Alexithymia, empathy and burn-out amongst radiation oncologists. The PRO BONO survey

Purpose/Objectives:

Burn-out syndrome (BOS) is a frequent stress-related syndrome amongst oncology professionals. It affects performance in the working environment, physical and mental well-being. Certain personality traits may predispose to BOS. Alexithymia is a psychological construct describing deficits in emotion processing and awareness. Empathy is the ability to share and understand another's 'state of mind' or emotion. The PROject on Burn-Out in Radiation Oncology (PRO BONO study) was developed to explore BOS in the field of radiation oncology and to investigate whether and how alexithymia and empathy may affect the likelihood to develop BOS.

Material/Methods:

An anonymous survey was conducted online using the platform SurveyMonkey, targeting all European Society for Radiotherapy and Oncology (ESTRO) members. All professionals within ESTRO were involved, providing specific demographic and professional information, and requested to complete 3 validated questionnaires to evaluate alexithymia, empathy and BOS: the Toronto Alexithymia Scale (TAS-20), the Interpersonal Reactivity Index (IRI) and the Professional Quality of Life Scale (ProQoL), respectively. The present analysis was focused on the population of radiation oncologists. Compassion satisfaction (CS), secondary traumatic stress (STS) and BOS (the 3 ProQoL subscales) were evaluated and correlation with alexithymia and empathy (empathic concern, perspective taking and personal distress) was investigated using generalized linear modeling. Covariates found to be significant on univariate linear regression analysis were included in the multivariate linear regression model. R^2 and adjusted R^2 were used to assess model fit.

Results:

A total of 825 radiation oncologists, 56% male and 44% female, completed all requested questionnaires. Mean age was 41.8 years (SD:10.6). A higher level of alexithymia was associated to

significantly decreased CS (β :-0.292;SE:0.019;p<0.001), increased STS (β :0.417;SE:0.018;p<0.001) and BOS (β :0.417;SE:0.018;p<0.001). A higher empathic concern was significantly associated to increased CS (β :0.121;SE:0.335;p=0.001), STS (β :0.120;SE :0.309;p<0.001), with no significant effect on BOS (β :0.059;SE:0.298;p=0.070). Personal distress was significantly associated to decreased CS (β :-0.179;SE:0.302;p<0.001), increased STS (β :0.227;SE:0.278;p<0.001) and BOS (β :0.178;SE:0.268;p<0.001). Perspective taking had no significant influence on CS, STS nor BOS.

Conclusions:

The PRO BONO study provided an overview on BOS, alexithymia and empathy among radiation oncologists. Alexithymic personality trait increased the likelihood to have BOS, with less professional satisfaction. Empathic concern was associated to increased level of stress (STS), but did not lead to BOS, resulting in higher professional fulfillment. Conversely, personal distress was associated to increased STS and BOS.

Predictor	R ²	Adj R ²	F	B	SE B	β	P
Compassion Satisfaction	0.21	0.205	43.49 (<.001)				
Alexithymia				-.158	.019	-.292	<.001
Empathic Concern				1.164	.335	.121	.001
Perspective taking				.742	.318	.082	.020
Personal Distress				-1.531	.302	-.179	<.001
Fantasy				-.177	.258	-.023	.492
Burnout	0.31	0.305	73.24 (<.001)				
Alexithymia				.218	.017	.426	<.001
Empathic Concern				-.539	.298	-.059	.070
Perspective taking				-.533	.282	-.062	.059
Personal Distress				1.437	.268	.178	<.001
Fantasy				.489	.229	.067	.033
Sec Traumatic Stress	0.33	0.329	81.7 (<.001)				
Alexithymia				.226	.018	.417	<.001
Empathic Concern				1.161	.309	.120	<.001
Perspective taking				-.001	.293	.000	.999
Personal Distress				1.940	.278	.227	<.001
Fantasy				.859	.237	.112	<.001