

Spirituality and Quality of Life in Patients Receiving Radiation Therapy (RT) at a NCI-Designated Cancer Center: Preliminary Report from the Knight Cancer Institute Patient-related Outcomes (PRO) Database

BT Samuelson¹, EK Fromme^{1,2}, TL McDonald¹, J Waller¹, Fuller CD^{1,3}, CR Thomas, Jr^{1,2}

¹Radiation Medicine, ²HematologyOncology, Knight Cancer Institute at the Oregon Health & Science University, Portland, OR

³Radiation Oncology, University of Texas Health Science Center @ San Antonio, San Antonio, TX

Purpose/Objectives:

Spirituality is important but poorly understood. This study evaluates the impact of radiation therapy (RT) on spiritual well-being and quality of life (QOL).

Materials/Methods:

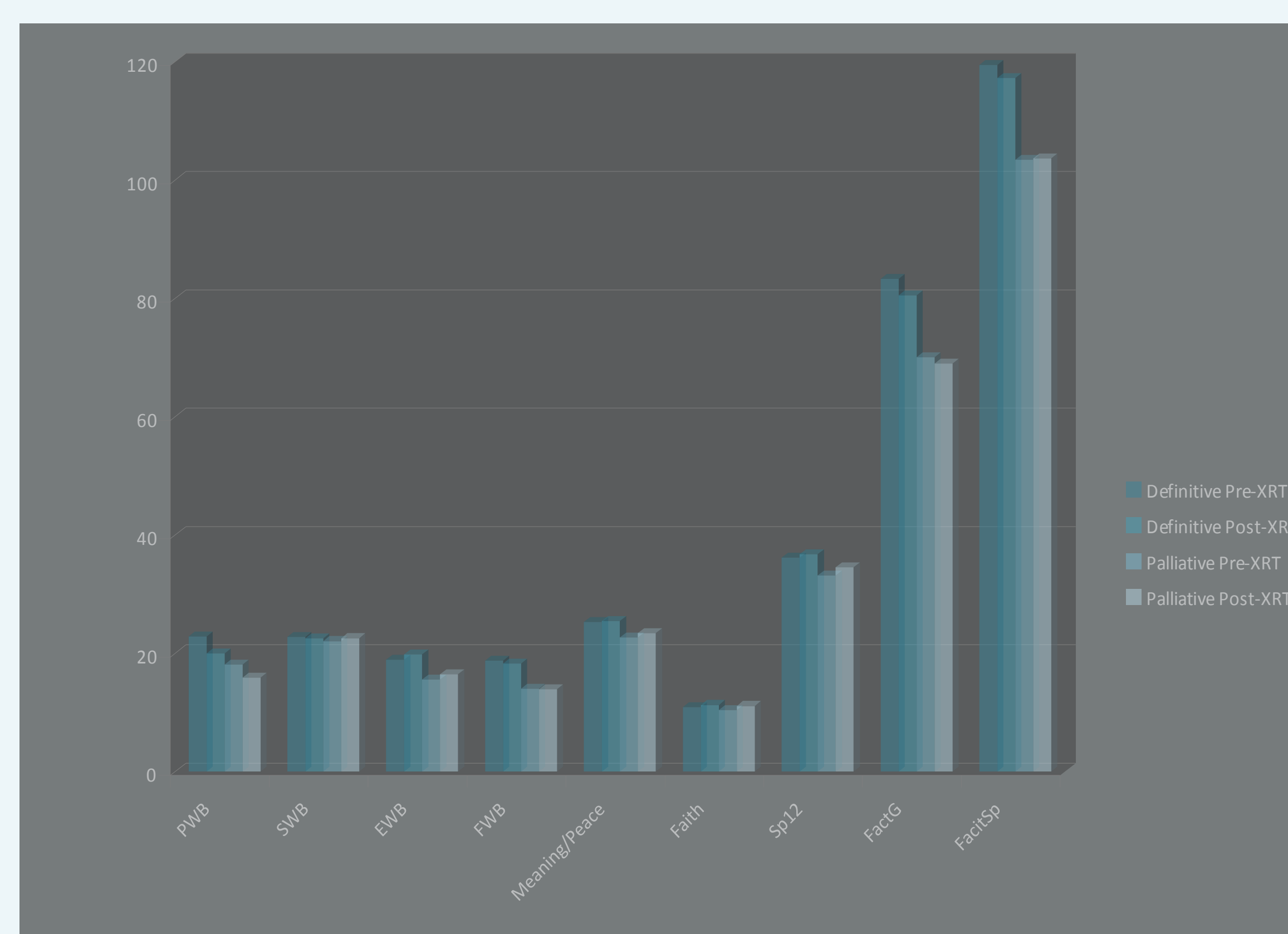
A retrospective, IRB-approved chart review was performed of 722 patients receiving RT for any cancer diagnosis between 1/1/2006 and 12/31/2008. Subjects completed the Functional Assessment of Cancer Therapy General (FACT-G) and Spirituality (Sp-12) questionnaires before and after radiation therapy as part of the department's efforts to incorporate Patient Reported Outcomes into clinical care. Pre- and immediately post-RT course scores were compared using student *t*-tests with Bonferroni correction for multiple comparisons (8 comparisons, alpha = .00625).

Results: 722 of 1369 (52.7%) possible patients participated in the PRO database. Of these, complete pre and post RT spirituality data were available for 406 (56.2%). Of these patients, 270 (66.5%) were male and 136 (33.5%) were female, 340 (83.7%) received definitive treatment and 64 (15.8%) received palliative treatment. The average age was 61.1 years. Global QOL declined between pre and post-RT (81.3 to 78.9 (p<.001). This was caused largely by declines in physical wellbeing (22.1 to 19.4 (p<.001) while emotional well being (18.4 to 19.3 (p<.001) improved and social/family wellbeing (22.7 to 22.6, p =.544) and functional (18.1 to 17.63 (p=0.063) wellbeing remained constant. Overall spirituality remained constant (35.7 to 36.5, p =.023) including both the faith and meaning/peace subscales. In exploratory subgroup analyses, women's scores on the faith subscale increased significantly (10.92 to 11.87, p=.001) although their meaning/peace subscale increase was not significant.

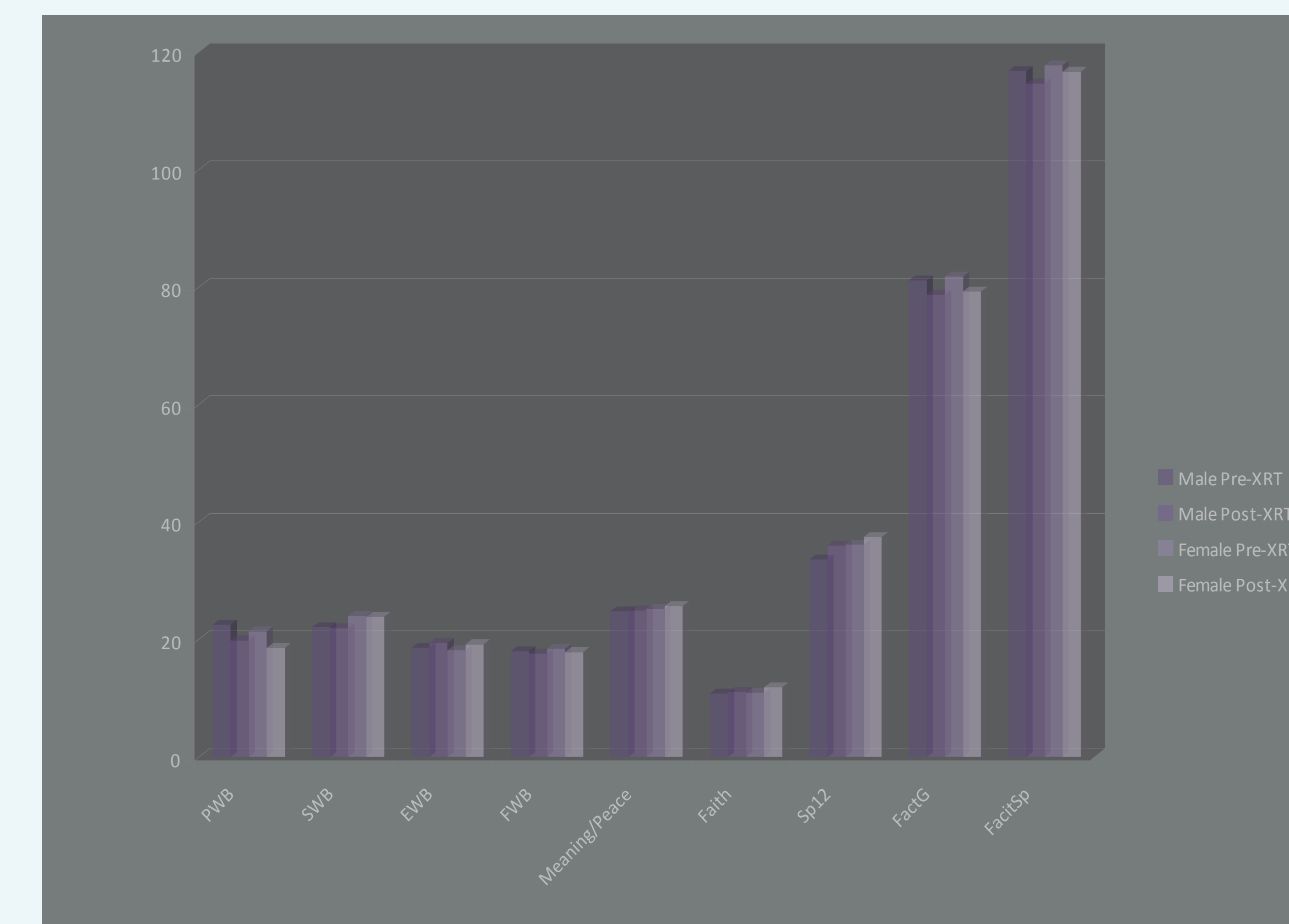
Conclusions: Spiritual wellbeing, like social/family wellbeing and functional wellbeing, did not change between pre and post RT, while physical wellbeing worsened and emotional wellbeing improved. This data serves to emphasize the multi-dimensional impact of RT on the lives of patients undergoing treatment and the importance of evaluating emotional, spiritual and other multidisciplinary effects in addition to the physiological when assessing the impact of therapies on patient outcomes. Patient reported outcomes like QOL and spirituality should be routinely embedded into therapeutic-based clinical trials involving RT, including emerging technologies, in order to better understand their true impact.

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Definitive vs Palliative XRT



Males vs Females



Pre- vs Post-Treatment Parameters for All-Comers

	Pre-Treatment	Post-Treatment	P-value
Physical Well-Being	22.11	19.38	.000
Social Well-Being	22.69	22.56	.544
Emotional Well-Being	18.42	19.30	.000
Family Well-Being	18.09	17.63	.063
FACT-G	81.31	78.85	.000
Meaning-Peace	24.91	25.18	.209
Faith	10.83	11.28	.007
Sp-12	35.74	36.45	.023
FACIT-Sp	117.10	115.31	.018