Time-Site differences in Cancer Survivors Ratings of Distress due to COVID-19 and Exercise Clinics Closure

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PURPOSE: To determine differences and 6-month changes in Cancer survivor reported levels of distress relating to COVID-19 pandemic and closure of Cancer Exercise Rehabilitation Clinics at three sites: Pacific Island site (S1, n=50), Urban (S2, n=102) and Rural (S3, n=14). METHODS: Cancer Survivors (n=166; 89% female, 87% white, 46% Breast Cancer) who participated in structured exercise prior to the pandemic completed a modified NCCN Distress Thermometer in March 2020 (T1) and September 2020 (T2). COVID-19 and Exercise Clinic Concern categories were added to existing categories. Distress Ratings, identification of Problem Concerns, changes and correlations were determined. RESULTS: Sites S2 (4.38) S3 (4.77) met mean clinical distress levels (>4) while S1 did not (3.64). All ratings decreased slightly T1 (N=50) to T2 (N=115) with no significant site or time differences. Emotional (46%) and Exercise Clinic Closure (48%) were most frequently identified Problem Concerns. 2 X 2 ANOVA identified Site (F=3.086 P=.048, df=2) and Time (F=7.521 P=.007, df=1) differences in Physical Concerns, with Post-Hoc Tukey HSD differences in sites 1 vs 2, and 1 vs 3. Site differences (F=6.987 P=.001, df=2) in Exercise Concerns were noted with Post-Hoc Tukey HSD (2 vs 3). Time (F=9.044 P=.003 df=1,) differences in COVID-19 Concerns with no Post-hoc differences. A trend in Family Concerns (F =2.267, P=.107, df=2) notedPost-Hoc differences sites 1 vs 2. Multiple Significant Site, Time correlations were noted with Distress. Exercise Concerns had no time, site Distress Correlations while COVID-19 Concerns had 2 site and 2-time correlations. Emotional Category Correlations occurred at all sites, most times and with all other categories. CONCLUSION: Overall Rural (S3) survivors had higher ratings of distress (4.77) identified more concerns (avg 34%) vs Urban S2 (4.38; 26%) and Pacific Islanders S1 (22%) who also had the lowest distress rating (3.64), and warrants more investigation. Multi-factorial Contributions to Clinical levels of distress was confirmed with Emotional Concerns the primary contributor. Exercise Concern lack of Distress correlation suggests it contributes less to distress than expected. However, Emotion-Exercise associations suggests Exercise does contribute to well-being.