## Self Reported Lifetime Physical Activity in a Sample of Rural Cancer Survivors: A Pilot Study.

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The evidence of the benefits of exercise for those diagnosed with Cancer has grown significantly. These findings include prevention as a measure against cancer occurrence or reoccurrence has been growing significantly. As part of a larger ongoing study examining the characteristics of the rural cancer population in west central Pennsylvania, this study investigated the association between lifetime physical activity and cancer. Purpose: To describe the levels of self-reported lifetime leisure time physical activity levels in a sample of rural cancer survivors. Methods: A sample of 39 rural cancer survivors were initially included in the study. Participants recruited from newspaper postings, emails or posters were mailed questionnaires. Thirty-three (33) questionnaires were returned and 27 had usable data. Physical activity data was collected using a modified version of the Historical Leisure Activity Questionnaire. Data was separated using the following age groups: 13-17, 18-22, 23-34, 35-50, 51-65, and 66-80. Total MET Hours were calculated and were compared to a bench mark of physical activity according to ACSM recommendations of 2.5 hours of moderate intensity activity per week. The comparator of a 5 MET activity was used in the calculation of the benchmark MET Hours value. This study was approved by the Saint Francis University Institutional Review Board. Results: Twenty-seven (27) predominantly white, non-Hispanic participants, with a mean age of 60 years (27 to 77 years) completed all outcome measures. The mean age of Cancer diagnosis was 51 years, (9 to 70 years). Breast Cancer (n=11) was the predominate Cancer reported. Significant differences (p<0.05) from actual to predicted MET levels were found for each age group, except for the 13-17 group. The 13-17 group was the only group that exceeded the ACSM recommendation. The following groups demonstrated significantly lower MET level than predicted: 18-22 (p<.017), 23-34, (p<.016), 35-50 (p<.000), 51-65 (p<.001), and 66-80 (p<.043). Conclusion: This pilot data supports the evidence that reduced physical activity is associated with a cancer diagnosis, and suggests that lifetime physical activity levels may play a role in the incidence of Cancer in a rural population. Support was provided by the Office of Student Research.