The Impact of Previous Athletic Participation on Health Related Quality of Life in Current Collegiate Athletes.

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Context: The SF12v2.0 is used by medical professionals across the US to measure Health Related Quality of Life (HRQL) in their patients. The Physical Composite Score (PCS) and Mental Composite Scores (MCS) from the SF12 v2.0 are recognized as valid measures of an athlete’s function prior to and following an injury with a higher score indicating better HRQL. It is accepted that in order to be successful, athletes must undergo rigorous training, make significant time commitments and experience significant levels of stress which may adversely affect their HRQL. The extent that HRQL is affected after the completion of a collegiate sport season has not been reported. Understanding how athletic participation affects HRQL will enable sports medicine professionals to better understand and influence HRQL outcomes of collegiate athletes. **Objective:** To determine if HRQL changes following the completion of a competitive sport season. **Design:** Prospective cohort. **Settings:** Data were collected at a single Div. I University. **Participants:** Participants included college athletes (age = 20.4 ± 1.8 years) participating in Cross Country (female = 41, male = 15), Football (male = 88), Soccer (female = 23, male = 21) and Volleyball (female = 22). **Interventions:** Each subject completed the SF12v2.0 during the summer prior (PRIOR) to the start of their sport season and one month after the completion of their season (POST). Raw scores were converted to norm-based scores via a linear z-score transformation. Higher MCS and PCS scores indicate improved HRQL. The US norm based scores for young (age 18 – 24 yrs.) females = 44.3+12.8 for the MCS and 52.9+8.6 for the PCS while young males = 49.07+11.4 for the MCS and 53.1+11.0 for the PCS. Paired t tests (p< 0.05) were utilized for the analyses. **Main Outcome Measures:** Dependent variables included the change (mean + SD) in from PRIOR to POST MCS and PCS for the subjects. Paired t tests (p< 0.05) were utilized for the analyses. **Results:** There was no difference (p=0.237) for females for the MCS (PRIOR = 51.1+9.9, POST = 52.1+7.9) and no difference (p=0.388) for females for the PCS (PRIOR = 55.1+6.0, POST = 54.5+6.4). Males exhibited higher (p=0.003) MCS after completion of their season (PRIOR = 52.2+11.4, POST 55.4+6.2). There was no difference (p=0.467) for males for the PCS (PRIOR = 55.0+5.1, POST=54.5+5.8). **Conclusions:** Despite the rigorous training, extensive time commitment and high stress associated with participating in collegiate athletics, HRQL was not adversely affected following the completion of a sport season. Further, males exhibited higher MCS after completion of their sport season. Sports medicine providers should be aware that lower HRQL after completion of a sport season may be caused by factors that are not associated with previous athletic participation.