

depression ( $B=.37$ ,  $CI=.17$  to  $.72$ ). Direct effects from communication to anxiety ( $B=.18$ ,  $CI=1.1$  to  $3.19$ ) and depression ( $B=.16$ ,  $CI=.73$  to  $2.44$ ) were both significant.

**Discussion or Conclusions:** This study supports aspects of the conceptual model of age-appropriate care for this population. Specifically, understanding illness underpinned the relationship between healthcare professionals' communication and anxiety and depression after cancer. Ensuring TYA have access to knowledgeable healthcare professionals who have the skills to clearly communicate with this population may support young people to better understand their illness and thus reduce symptoms of anxiety and depression.

### 386 | Identifying the symptoms and concerns of Adolescents and Young Adults (AYAs) with cancer in Alberta using Patient Reported Outcomes

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**Background/rationale or Objectives/purpose:** The experience of Adolescents and Young Adults (AYAs) with cancer is quite unique, due to their age and developmental stage. Identifying the distinct needs of AYAs can help ensure they are provided individualized care and can aid in creating targeted programs and system-level change. We sought to identify the key concerns of this population using data from Patient Reported Outcomes (PROs) questionnaires, which are used as part of routine care in Cancer Care Alberta.

**Methodology or Methods:** Retrospective data were collected for two patient cohorts who completed at least one PROs questionnaire between October 1, 2019 and April 1, 2020. The AYA cohort was aged 18-39, and the second cohort was aged 40 and older. Symptoms were compared using mean scores and multiple linear regression, and concerns were compared using counts and multivariate negative binomial regression.

**Impact on practice or Results:** The AYA cohort ( $N=2,089$ ) had significantly higher mean scores on depression and anxiety compared to the older cohort ( $N=27,153$ ). The younger cohort indicated emotional concerns such as "thoughts of ending my life", "intimacy/sexuality", and "changes in appearance" more frequently than the older cohort, and were 3.25 times more likely to be concerned about work or school.

**Discussion or Conclusions:** Using PROs to identify the distinct needs and concerns of AYAs with cancer can help drive evidence-based change at all levels of the health care system to ensure comprehensive, quality cancer care for this population. AYA-specific programs and other supportive resources can help this young population manage their symptoms and concerns.

### 399 | Examination of Social Attainment Outcomes among Adolescents and Young Adults Diagnosed with Cancer Compared to the Canadian Population: A YACPRIME Study

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**Background/rationale or Objectives/purpose:** Adolescents and young adults (AYAs), 15-39 years of age, diagnosed with cancer may experience significant interruptions to achieving key developmental milestones. The aim of this study was to examine social attainment (i.e., employment, student and relationship status, living situation) in a national cohort study of AYAs diagnosed with cancer compared to the Canadian population.

**Methodology or Methods:** We used data from the Young Adults with Cancer in their Prime (YACPRIME) Study. 621 AYAs (13.5% male, median age 34.0, range 20-64 years; median years from treatment completion=2.0 years, range 0-47 years) reported their employment status (employed vs. not), student status (student vs. not), relationship status (single vs. not) and living situation (living with parents vs. not) as part of the YACPRIME study. A 1:3 matched comparison group on sex and age was derived from the 2017 Canadian Community Health Survey (CCHS) ( $n=1863$ , 13.5% male).

**Impact on practice or Results:** Chi square analyses revealed significant differences between groups for employment status (56.4% AYAs employed vs. 77% comparison group;  $\chi^2=97.84$ ,  $p<.001$ ) but not for student or relationship status ( $p>.05$ ). Significantly more AYAs were living with their parents than the comparison group (11.9% vs. 7.1%, respectively;  $\chi^2=14.02$ ,  $p<.001$ ).

**Discussion or Conclusions:** Measures of social attainment are used to identify age-appropriate milestones and serve as indicators of functional status and/or predictors of socioeconomic outcomes. AYAs have significantly lower employment status, compared to the Canadian population, which has implications for their longer-term financial success and independence. Vocational counselling may be needed to help AYAs enter or return to work following their cancer diagnosis.

### 409 | Pediatric hematopoietic stem cell transplantation in malignant and non-malignant conditions: a longitudinal assessment of the health-related quality of life of sibling donors

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**Background/rationale or Objectives/purpose:** Hematopoietic stem cell transplantation (HSCT) is a potentially curative treatment for both malignant and non-malignant conditions. Sibling donations improve chances of event-free survival, however, pediatric sibling donors may be at increased risk of psychological and social challenges following HSCT donation. Through a retrospective chart review, we evaluated the health-related quality of life (HRQL) of pediatric sibling donors of both malignant and non-malignant conditions over time.

**Methodology or Methods:** Fifty-one sibling donors ( $M=10.7$  years,  $SD=3.7$ , sibling with malignant condition = 16) completed a HRQL questionnaire at six-time points (T1 to T6) from prior to donation to two years after. Change in mean scores was assessed using a linear mixed-effect model for repeated measures design. Differences in HRQL scores between conditions were explored.

**Impact on practice or Results:** HRQL of sibling donors improved between T1 and T6 with significant change in physical ( $-10.10 \pm 2.77$ ,  $t=-3.64$ ,  $p=0.001$ ), emotional ( $-19.98 \pm 5.17$ ,  $t=-3.86$ ,  $p=0.001$ ), and overall HRQL ( $-10.54 \pm 2.84$ ,  $t=-3.72$ ,  $p=0.001$ ). No significant