



POST-TRAUMATIC GROWTH & FLOURISHING IN ADULTS WITH BLOOD CANCER: A PATIENT-REPORTED WELLBEING CROSS-SECTIONAL STUDY

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INTRODUCTION and OBJECTIVES

Although blood cancer can negatively affect emotional, social, and spiritual wellbeing alongside physical health,¹ some patients describe post-traumatic growth (PTG), which is described as gaining a sense of meaning, purpose, or personal development, such as greater appreciation for life, or stronger relationships after living with serious illness.² Other patients also report flourishing, defined as a broad sense of wellbeing that includes life satisfaction, purpose, emotional stability, spiritual wellbeing, and connectedness.³

This study explored the psychological correlates of living with incurable cancer, focusing on the role of flourishing and PTG. We evaluated flourishing and PTG among adults with blood cancer from the HealthTree national patient registry, using validated patient-reported measures. We explored how post-traumatic growth and flourishing relate to one another and differ depending on patients' disease stages (e.g., newly diagnosed, maintenance, MGUS).

METHOD

Participants:

- 386 patients with multiple myeloma (MM) or MGUS completed the survey (mean age of 67.12 (SD = 8.37); 59% female; 89% Caucasian)

Measures:

- 10-item Post-Traumatic Growth Inventory-Short Form (0-50 possible range of scores)⁴
- 10-item Flourishing Index (0-100 possible range of scores)⁵ with 5 subscales:
 - Life Satisfaction
 - Meaning and Purpose
 - Spirituality
 - Mental and Physical Wellbeing
 - Social Connection

Procedure:

- Patients from a large national registry sample of cancer patients voluntarily filled out the survey electronically. Only patients with complete data and MM or MGUS diagnoses were included. No incentives were provided.

RESULTS

Pearson correlations revealed that the length of time living with cancer positively correlated with overall flourishing ($r = .18, p < .001$) and, in particular, with three of the five flourishing subscales: life satisfaction ($r = .14, p < .001$), mental and physical wellbeing ($r = .12, p < .05$), and meaning and purpose in life ($r = .21, p < .001$). Time with cancer did not significantly correlate with spiritual wellbeing or relational wellbeing, nor with PTG.

A Pearson correlation also revealed a significant relationship between overall flourishing and post-traumatic growth ($r = .27, p < .001$). As one experiences more growth when living with cancer, one also reports greater flourishing in life. This was true for all subscales of flourishing: life satisfaction ($r = .26$), mental and physical wellbeing ($r = .19$), spiritual wellbeing ($r = 0.12$), relational wellbeing ($r = .13$), and meaning and purpose in life ($r = .10$) (all $p < 0.05$).

One-way analyses of variance (ANOVAs) revealed that there was a significant difference in PTG ($F(4, 381)=4.06, p < .01$) and flourishing ($F(4,368)=8.42, p < .001$) among the different disease stages, with cured experiencing the most and MGUS experiencing the least PTG. Relapsed, maintenance, and cured patients experienced the most flourishing, and MGUS patients experienced the least flourishing (see Table 1, LSD post hoc-analyses differences shown with different colors).

Five additional ANOVAs found that all flourishing subscales except for spiritual wellbeing were significantly different across disease stages (all $p < 0.01$, see Table 2), with MGUS patients again showing least flourishing.

Table 1. Means and Standard Deviations of Post Traumatic Growth and Flourishing

Cancer Journey	Post-Traumatic Growth	Flourishing
MGUS (n=31)	19.84 (13.11)	63.19 (19.54)
Newly Diagnosed (n=35)	26.14 (12.50)	69.56 (13.94)
Relapsed (n=91)	27.57 (11.07)	75.49 (13.12)
Maintenance (n=223)	26.07 (13.21)	74.83 (14.52)
Cured (n=6)	40.00 (4.85)	73.57 (9.70)

Note: N= 386;

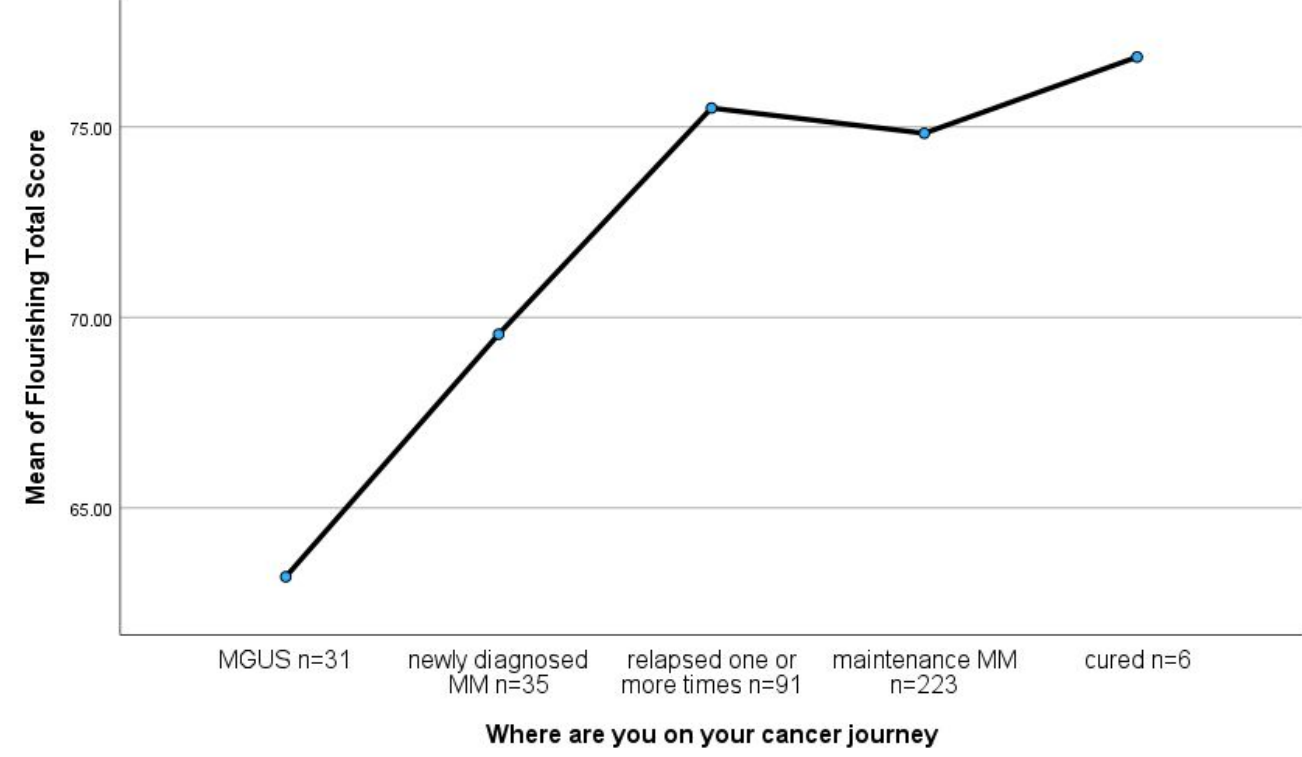
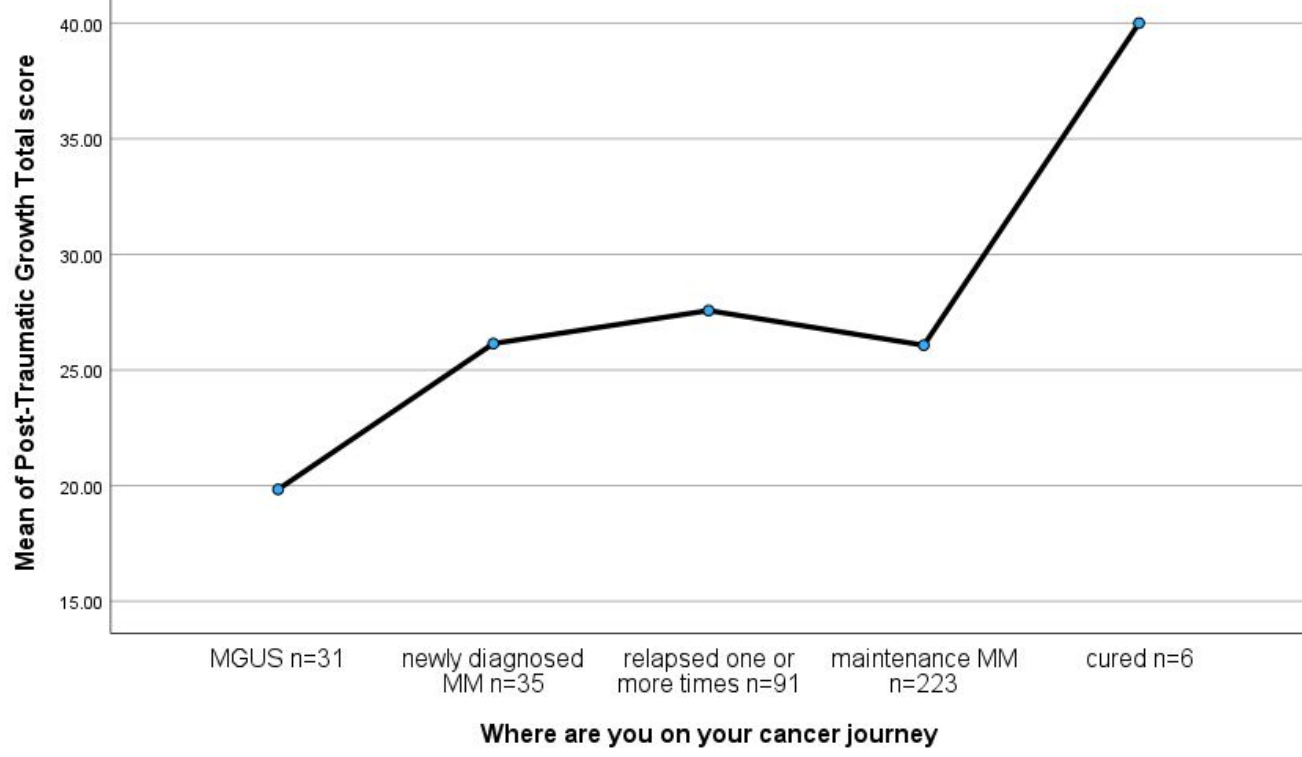
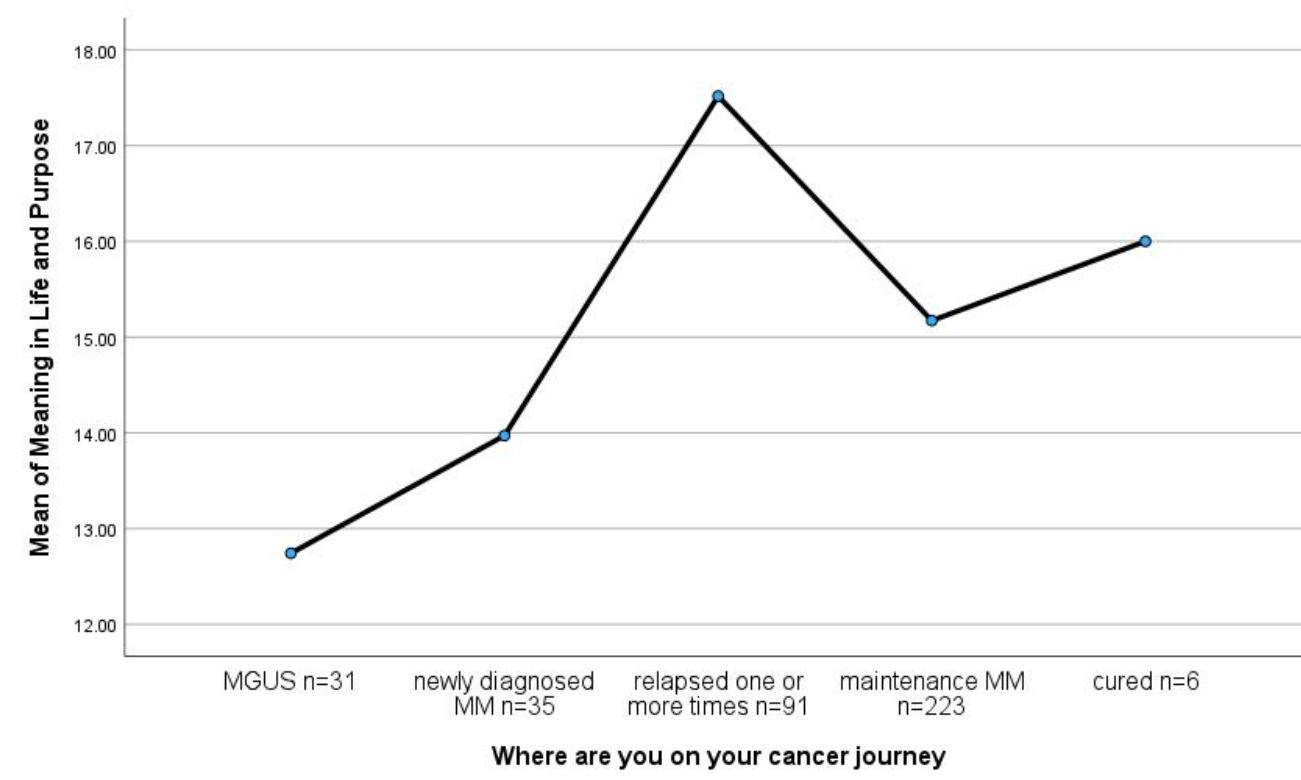
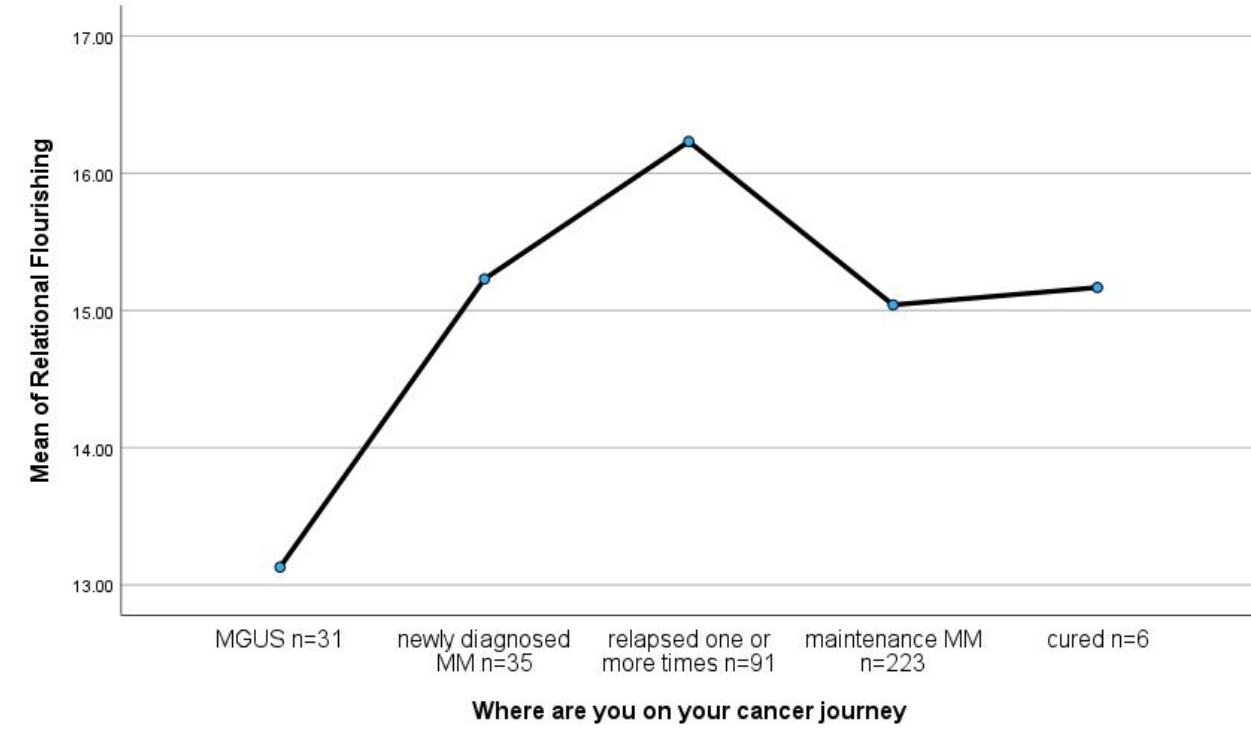
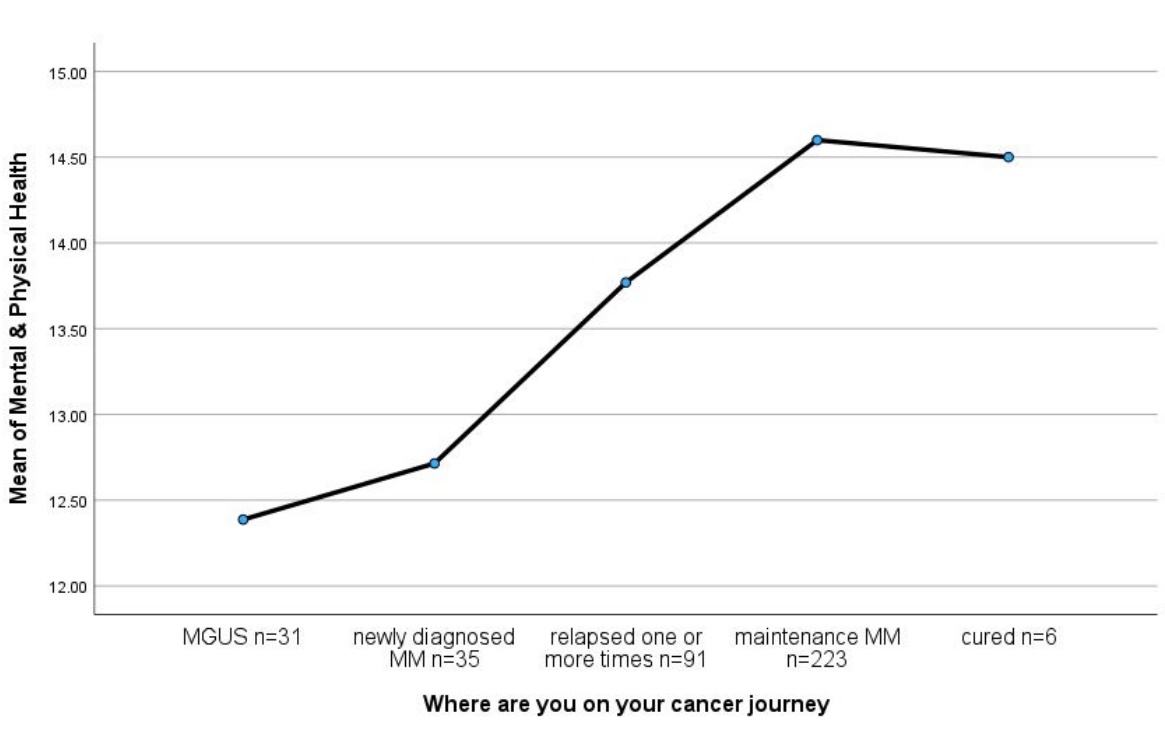
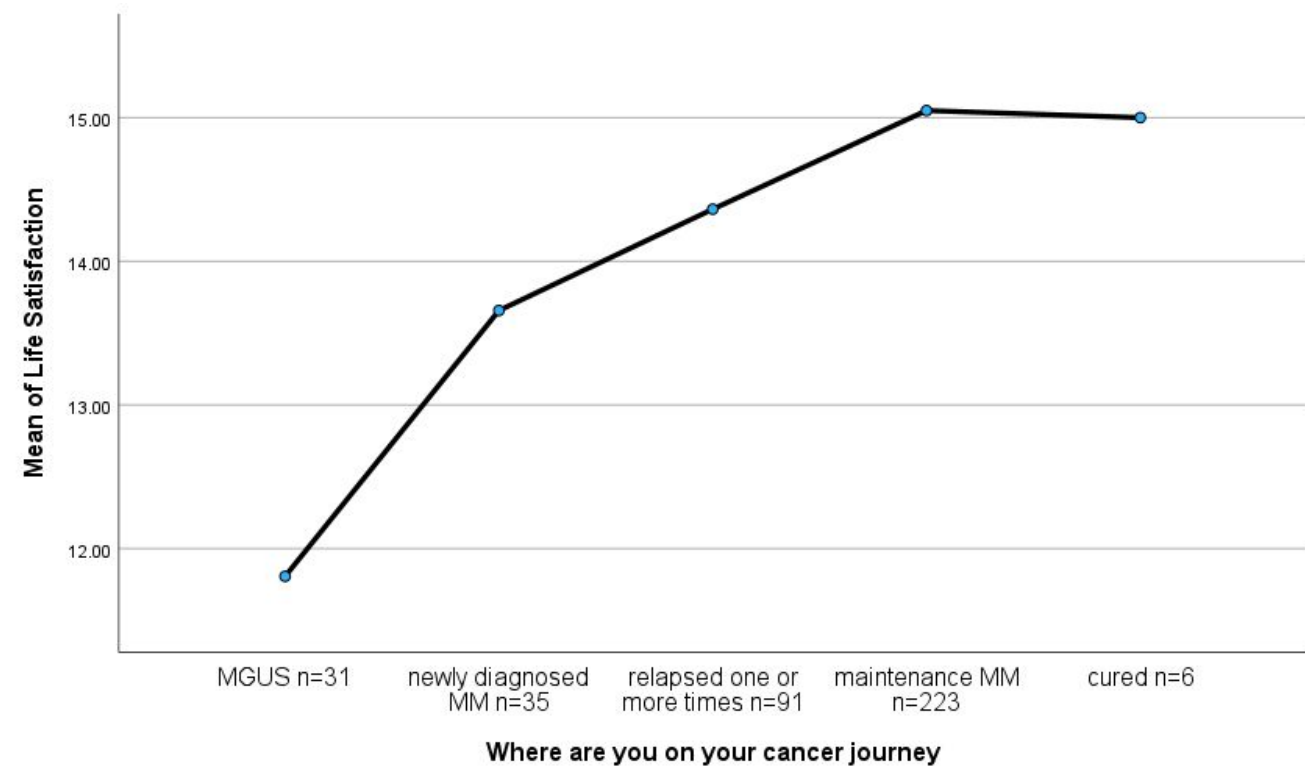


Table 2. Means and Standard Deviations of Significant Flourishing Subscales

Cancer Journey	Life Satisfaction	Mental/Physical Health	Social	Purpose
MGUS	11.80 (4.4)	12.39(4.3)	13.13 (5.0)	12.74 (5)
Newly Diagnosed	13.66 (3.8)	12.71 (3.7)	15.23 (3.8)	13.57 (4)
Relapsed	14.36 (3.5)	13.77 (3.4)	16.23 (3.3)	17.52 (5)
Maintenance	15.04 (3.2)	15.01 (3.1)	15.04 (3.3)	15.17 (4)
Cured	15.00 (3.4)	14.50 (3.5)	15.17 (4.6)	16.00 (2)

Note: N=386



CONCLUSIONS

In this large national registry sample, a substantial proportion of adults with blood cancer reported indicators of psychological growth and meaningful engagement with life, despite living with a serious illness and related distress. In fact, those living longer with cancer reported the most flourishing compared to those with MGUS or newly diagnosed.

These results reinforce the finding that wellbeing and living with blood cancer distress can coexist, and that many cancer patients experience purpose, emotional strength, and connection. Spiritual belief and practice emerged as relevant supports, and meaningful dimensions of patient experience.

Incorporating structured psychosocial and spiritual assessments into care may better support the emotional and existential needs of patients throughout their cancer journey⁶ Further research should examine how these self-reported outcomes relate to clinical stage, treatment decisions, and survivorship.

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