

Associations Between Marital Status and the Experiences, Challenges, and Survivorship Outcomes of Cancer Survivors

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INTRODUCTION

- The correlation between marital status and the survival outcomes of patients with cancer has been well-documented.¹
- However, its **significance for cancer survivors remains relatively unexplored**.
- This study investigates the relationships between survivorship care outcomes and marital status among Cancer Survivorship Clinic (CSC) patients at William Osler Health System (WOHS).

THE SURVIVORSHIP CLINIC

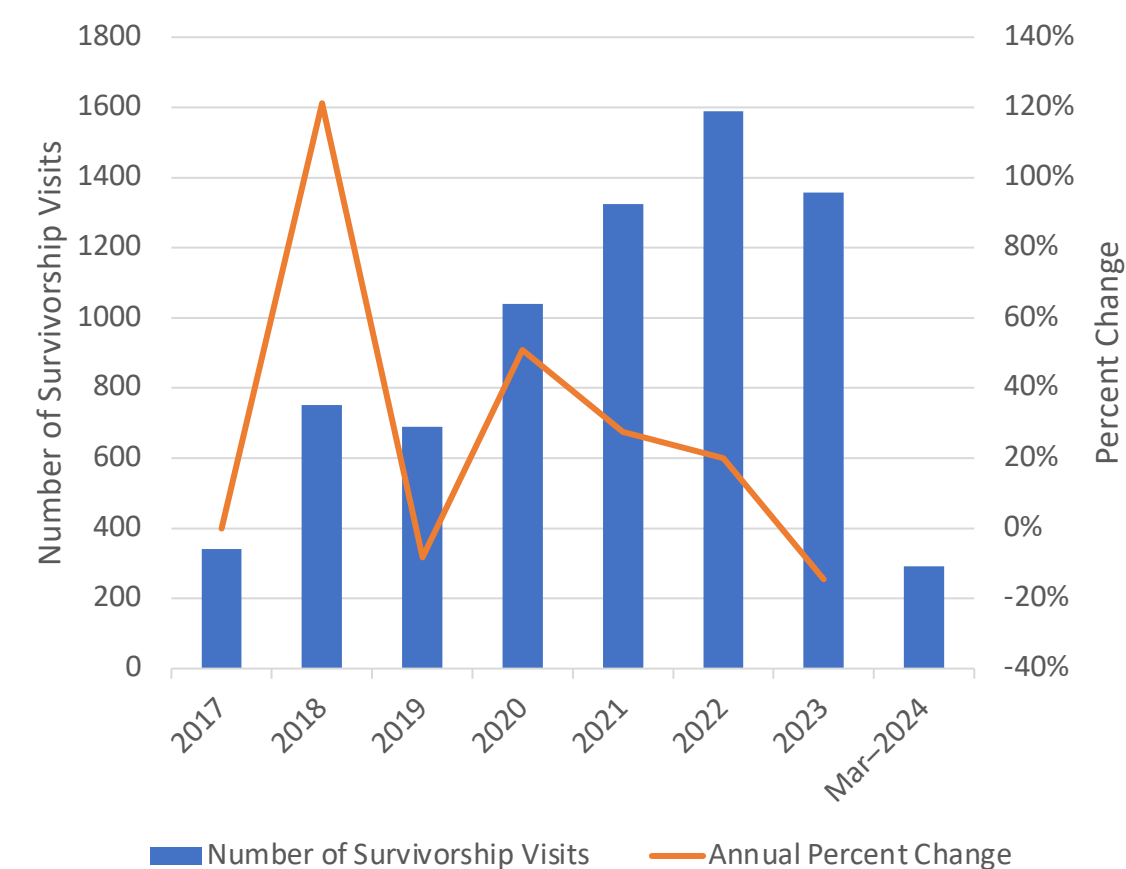


Figure 1. The annual growth of the CSC since its inception up to March 2024.

- The Cancer Survivorship Clinic (CSC) was established at William Osler Health System (WOHS) in 2017.
- The clinic aims to provide a transitional service between oncology and family physicians for patients who have completed primary anticancer therapy.
- An overview of the impact of the CSC on patient distress and symptom severity can be viewed in our preliminary reports.^{2,3}

METHODS

- This was a retrospective chart review of CSC patients from two WOHS community hospitals in Southern Ontario between Feb 2017 and Mar 2023.
- Primary outcomes were changes in distress and symptom severity, measured through the Distress Thermometer (DT), Canadian Problem Checklist (CPC), and Edmonton Symptom Assessment Scale (ESAS).
- Outcomes were presented by the following marital statuses: married/common law, single, separated/divorced, widowed.
- Descriptive statistics and *t*-tests were used to assess the outcomes.

DEMOGRAPHICS & DATA AVAILABILITY

Overview

- 1,680 patients were enrolled in the CSC** from Feb 2017 to Mar 2023. Marital status was available for 1,618 patients.
- Single patients were the youngest within the dataset (average 56 years) compared to widowed patients who were the oldest (average 75 years).
- Female patients and patients with breast cancer were the majority among all marital statuses.
- Due to limited record availability for single, divorced/separated, and widowed patients, results for these groups may not have sufficient power.

Table 1. Demographics and chart data availability of patients with documented marital status enrolled in the WOHS CSC.

Statistic Description	Married/Common Law	Single	Divorced/Separated	Widowed
Number of patients	1211	190	90	127
Number of visits (average per patient)	4561 (3.8)	658 (3.5)	275 (3.1)	357 (2.8)
Age—Median	61	56	66.5	75
Sex—% (n)				
Female	81.7% (989)	76.3% (145)	88.9% (80)	95.3% (121)
Male	18.3% (222)	23.7% (45)	11.1% (10)	4.7% (6)
Patient Cancer Group—% (n)				
Breast	71.8% (869)	63.7% (121)	74.4% (67)	74.0% (94)
GI	22.6% (274)	23.2% (44)	21.1% (19)	23.6% (30)
Other	5.6% (68)	13.1% (25)	4.4% (4)	2.4% (3)
Number of Patients with DT, CPC, and ESAS Record Availability				
DT at Baseline and First Follow-Up Visit	406	59	29	35
CPC at Baseline Visit	740	97	48	66
ESAS at Baseline and First Follow-Up Visit	350	51	27	27

RESULTS

DT Findings

- Among patients with DT records, only married/common law patients experienced a statistically significant **change in average distress from 3.0 at baseline to 2.5 at the first follow-up visit (p < 0.01)**.

ESAS Findings

- Among patients with ESAS records, **statistically significant (p < 0.05) changes are shown in Figure 2**.
- The magnitude of change was minimal in married/common law patients, larger in divorced/separated patients, and symptoms appeared to have worsened in widowed patients.
- There were no significant symptom changes in single patients.

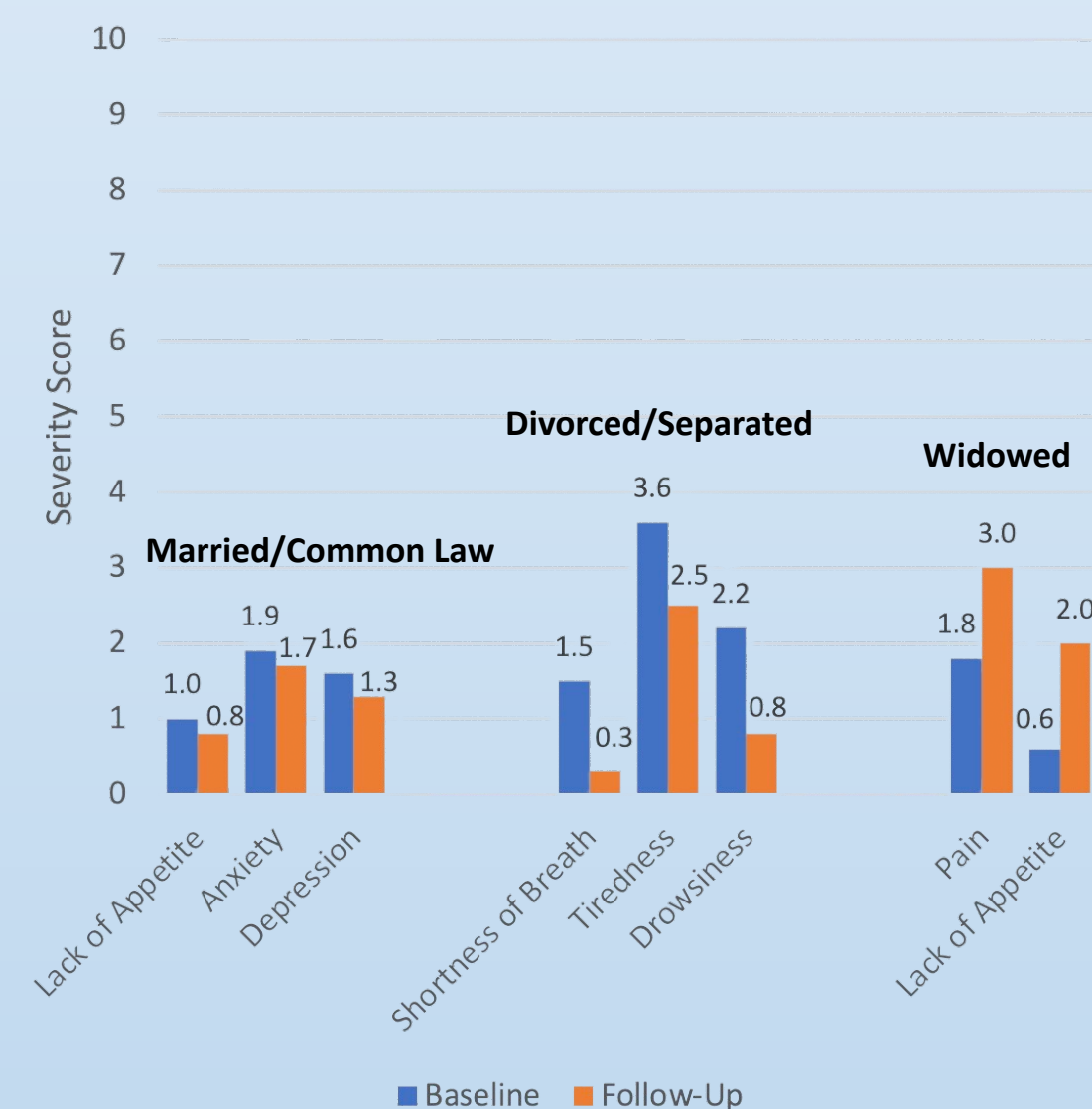


Figure 2. Statistically significant changes in ESAS symptom severity across marital status groups measured from baseline to the first follow-up visit.

CPC Findings

- The top five most frequently reported CPC items contributing to distress are shown in Table 2.** Pain and nervousness/anxiety were consistently ranked by all groups.

RESULTS CONT.

Table 2. Top five most frequently reported CPC items at the baseline visit categorized by marital status among patients with available CPC records.

Married/Common Law (n=740)	Single (n=97)	Divorced/Separated (n=48)	Widowed (n=66)
Pain (33.5%)	Fatigue (49.5%)	Fatigue (45.8%)	Forgetfulness (30.3%)
Fatigue (32.0%)	Nervousness/Anxiety (46.4%)	Pain (43.8%)	Nervousness/Anxiety (30.3%)
Tingling in Hands/Feet (31.9%)	Pain (43.3%)	Forgetfulness (41.7%)	Pain (28.8%)
Nervousness/Anxiety (31.0%)	Depression (39.2%)	Nervousness/Anxiety (39.6%)	Sleep/Insomnia (27.3%)
Sleep/Insomnia (29.3%)	Forgetfulness (39.2%)	Sleep/Insomnia (39.6%)	Tingling in Hands/Feet (27.3%)

CONCLUSIONS

- The experiences, challenges, and survivorship care outcomes of cancer survivors may be influenced by social factors such as marital status.
- Further research aims to expand on these findings by **interviewing patients and examining the role of other socioeconomic factors on survivorship**. This research is currently ongoing.

ACKNOWLEDGEMENTS

We would like to thank the Cancer Survivorship Clinic team at William Osler Health System and staff at Wellspring Chinguacousy for dedicating their work to empowering survivorship patients and their transition into community life.

REFERENCES

- Krajc K, Mirošević Š, Sajovic J, Klemenc Ketiš Z, Spiegel D, Drevenšek G et al. Marital status and survival in cancer patients: A systematic review and meta-analysis. *Cancer Med* 2023; **12**: 1685–1708.
- Jammu A, Chasen M, van Heest R, Hollingshead S, Kaushik D, Gill H et al. Effects of a Cancer Survivorship Clinic—preliminary results. *Support Care Cancer* 2020; **28**: 2381–2388.
- Li D, Chasen M, Lilani R, Cerocchi O, Fernando D, van Heest R. Updates on the Effects of a Cancer Survivorship Clinic on Patient Distress and Symptom Severity. *Support Care Cancer* 2023; **31**: S243.

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