Exploring Multidimensional Symptom Patterns Across Survival Groups in Hospice Care

N. Stoks, T. Meulenbeld, D. Zwart, S. Teunissen, E. de Graaf
University Medical Centre Utrecht, Utrecht, The Netherlands

Introduction

In the Netherlands, hospice care is for patients with a life-limiting illness and a life expectancy of under three months. Admissions may be considered inappropriate if they are very short or prolonged. Understanding how multidimensional symptoms and concerns (MDSC) change after admission can help identify patterns linked to such admissions.

Aim

To explore MDSC patterns during the first four weeks after hospice admission and examine how these relate to survival length.

Method

A cohort study was conducted in 15 Dutch hospices (2017–2025).

MDSC were assessed using the Utrecht Symptom Diary–4D (0–10 scale). Symptom profiles (prevalence ≥1, clinical relevance ≥4, intensity) were measured at admission and weekly for four weeks. Patients were grouped by survival time: short (0–3 days), average (4–93 days), and prolonged (≥94 days). Descriptive statistics (complete-case) summarised characteristics and symptom patterns.

A complete-case analysis using descriptive statistics summarised patient characteristics and symptom patterns across survival groups.

Early and repeated symptom monitoring facilitates the assessment of the appropriateness of hospice admission.

Results

A total of 2112 hospice patients were included: 82 had short survival, 1825 had average survival, and 205 had prolonged survival. Median age was 76 years; 53% were female.

Fatigue, anorexia, dry mouth, and abnormal stool were the most prevalent symptoms across all groups. The intensity of the symptoms and concerns decreased or stabilised within two weeks. In the table below, the intensity scores are presented only for admission and the first two weeks after admission.

	Short	Average			Prolonged		
	Admission	Admission	Week 1	Week 2	Admission	Week 1	Week 2
Pain	1.5	2	2	2	1	1	2
Sleeping problems	2	2	2	1	1	1	1
Dry mouth	6	5	5	3	3.5	1	2
Dysphagia	2.5	0	0	0	0	0	0
Anorexia	8	5	5	4	3	0	1
Abnormal stool	5	5	5	4	3	2	2
Nausea	1	0	0	0	0	0	0
Dyspnea	0.5	0	0	0	0	0	0
Fatigue	7	6	6	5	5	5	4
Feeling different	5	4	3	2	1	1	0
Anxiety	0	0	0	0	0	0	0
Depressed mood	1	0	0	0	0	0	0
Well-being	7	4	3	4	2.5	1.5	2.5
Value of life	5	2	2	3	0	2	1
Taking time for oneself	4	2	1	1	2	0	1
Bearing what happens to me	1	2	1	1	2	2	2
Letting loved ones go	5	5	5	5	5	5	6.5
Perceived balance in life	2	2	1	2	3	3	3
Thinking about the end of life gives peace of mind	3	2	2	2	4.5	4.5	5

Median: 10.0, 7.5, 5.0, 2.5, 0.0

Conclusion

Symptom profiles of hospice patients were similar at admission but diverged within two weeks between average and prolonged stays. These observations suggest that early and repeated symptom monitoring facilitates the evaluation of whether patients continue to receive appropriate care within hospice.

Contact: j.m.stoks-2@umcutrecht.nl