Factors Associated with Improvement in Patient-Reported Outcomes After Receiving Early Palliative Care

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Background

Definition

- Early palliative care (EPC) is that implemented at the time of, or shortly after, diagnosis of advanced disease

International Support

- Specialized EPC is a widely accepted, evidence-based global initiative that improves quality of life and symptom burden in advanced cancer^{1,2}
 - WHO (2010): recommended for all life-limiting illnesses
 - ASCO (2017): recommended as concurrent with active treatment in advanced cancer

Study Rationale

- EPC improves quality of life and symptom burden but universal implementation is impractical

Barriers to Universal Implementation

- Cost and time efficiency
- Limited human resources
- Potential duplication of services
- Feasibility across different settings

Potential Solution

- Targeting patients most likely to benefit from early intervention

Purpose

To determine predictors of EPC treatment response at 4 months in advanced cancer patients

Methods

Study Design

- Secondary analysis of cluster-randomized trial (Zimmermann et al 2014)³

Study Sample

- 131 patients with advanced cancer randomized to EPC intervention

EPC Intervention

- Consult by palliative MD and nurse within 1 month of diagnosis + routine follow up

Eligibility Criteria

Inclusion	Exclusion
• ≥18 years old	• Insufficient English literacy
• Stage IV or equivalent	• Cognitive impairment
• ECOG 0-2	
• ~6-24 months survival	

Baseline Demographic Data

Patient Characteristics	(%)
Mean Age (range; years)	60 ± 11 (30-84)
Female	64
Married/Common Law	66
Living Alone	23
Employment Status	
Retired	40
Employed	22
Unemployed	13
Disability	25
College/University Educated	73
Ethnicity	
N. American	30
European	49
Asian	18
Other	6

Cancer Profile	(%)
Primary Tumour Site	
Breast	21
GI	30
GU	11
Lung	15
Gynecological	23
Active Chemo	79
Active radiation	7
CCI Score > 0	29
ECOG Score	
0	33
1	63
2	4

References

¹ Bakitas et al. Effects of a palliative care intervention on patients with advanced cancer: the Project ENABLE II randomized controlled trial. *JAMA* 2009;302:741-49.
² Temel et al. Early palliative care for patients with metastatic non-small-cell lung cancer. *N Engl J Med* 2010;363:733-42.
³ Zimmermann C et al. Early palliative care for patients with advanced cancer: a cluster-randomised controlled trial. *Lancet* 2014;383:171-30

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Predictors of Treatment Response

Quality of life

- FACIT-Sp:
 - More severe baseline physical symptoms (ESAS-EDS) (p=0.001)
- QUAL-E:
 - Less medical comorbidity (CCI) (p=0.045)

Symptom severity (ESAS-EDS)

- More severe baseline physical symptoms (ESAS-EDS) (p<0.001)
- Less medical comorbidity (CCI) (p=0.007)

Satisfaction with care (FAMCARE-P16)

- Living alone (p=0.03)
- Not receiving active chemotherapy (p=0.03)

* **No** effect for age, sex, primary tumour site, or education/employment status

Discussion

- Patients with greater **symptom burden** and **support** needs (i.e. living alone) are most likely to benefit from EPC
- The finding that symptom severity predicts response on FACIT-Sp but not on QUAL-E may be explained by differences in the **domains** assessed by each measure
 - QUAL-E – includes life completion, preparation for end of life
 - FACIT-Sp – includes physical and emotional quality of life

Strengths

- Large sample
- Validated measures
- Data based on rigorously conducted RCT
- High quality EPC Intervention

Limitations

- Post hoc secondary analysis
- Single site study at a comprehensive cancer center

Future Directions

- Establishing **evidence-based cutoffs** on symptom **screening** to maximize benefit from EPC
- Greater specification of **support needs** and optimal interventions in patients with low social support
- Clarifying the role of EPC on **comorbid conditions**