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EP17.22: Advancing Palliative Care in Lung Cancer: Evidence-Based Guidelines from India Using the GRADE Approach

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INTRODUCTION

- ❖ In India, guideline development is shifting from consensus-based approaches to structured, evidence-based methods
- ❖ This is the country's first evidence-based lung cancer guideline for palliative care.
- ❖ Despite advances in palliative care, patients continue to experience significant unfulfilled needs.
- ❖ In this context, the Ministry of Health and Family Welfare, Government of India, developed evidence based and methodologically sound recommendations for the palliative management of lung cancer.

METHODS

- ❖ These guidelines followed standard methodologies with involvement of a Steering Group (SG), Guideline Development Group (GDG), and systematic review teams.
- ❖ Priority questions were framed using PICO format, followed by systematic reviews, and grading of evidence using the GRADE approach.

- ❖ Recommendations were formulated using the Evidence-to-Decision (EtD) framework, incorporating benefits and harms, patient values, resource use, feasibility, and equity considerations, followed by external peer review and public consultation prior to finalization.
- ❖ The GDG finalized three guideline questions that addressed the 1) impact of early integrated palliative care, and 2) the effectiveness of multimodal interventions versus single-modality approaches for managing dyspnoea and 3) symptom clusters (insomnia, fatigue, and depression) in patients with lung cancer.

- ❖ The guideline development process was undertaken from January 2024 to December 2025.

DISCUSSION AND CONCLUSION

Actionable Take Away Message

- These guidelines aim to support policymakers, clinicians, and multidisciplinary oncology teams in delivering evidence-based palliative care for lung cancer patients.

- They also provide consolidated evidence base and highlight key research gaps to inform future clinical and implementation research.

Future Direction for Research

- These are the first evidence-based guidelines on palliative care for patients with lung cancer from India.

- While developed in the Indian context, these guidelines will also serve as a useful reference for various healthcare systems in Low- and Middle-Income Countries (LMICs) and globally.

REFERENCES & ACKNOWLEDGEMENTS

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RESULTS

Summary of Findings (SoF) Tables

Early integration of Palliative care along with Standard Oncological Care versus Standard Oncological care alone						
Patient or population: Patients with Lung Cancer						
Intervention: Palliative care with standard oncological care						
Comparators: Standard Oncological Care						
Outcome	Anticipated absolute effect ^a (95% CI)	Relative Effect (95% CI)	No. of Participants (Studies)	Certainty of the Evidence (GRADE)	Comments	
Symptoms Burden Control						
RADS Anxiety	Mean score 4.53 RD 0.49% lower (2.64 lower to 2.67 higher)	-	426 (3 RCTs)	⊕○○○ Very Low	The evidence is very uncertain about the effect of early integration of Palliative care with standard oncological care on RADS Anxiety.	
RADS Depression	Mean score 5.77 RD 0.41% lower (2.46 lower to 3.68 lower)	-	426 (3 RCTs)	⊕○○○ Very Low	Early integration of Palliative care with standard oncological care may reduce RADS Depression.	
Edmonton Symptom Assessment Scale (ESAS)	Mean score 97.64 RD 0.58% lower (6.4 lower to 45.2 lower)	-	115 (1 RCT)	⊕○○○ Very Low	The evidence is very uncertain about the effect of early integration of Palliative care with standard oncological care on ESAS.	
Distress Thermometer (DT) score	Mean score 5.5 RD 0.6% lower (3.49 lower to 0.58 higher)	-	97 (1 RCT)	⊕○○○ Very Low	Early integration of Palliative care with standard oncological care likely reduces DT score.	
Quality of Life						
FACT-L	Mean score 97.29 RD 0.33% higher (3.53 higher to 3.69 higher)	-	485 (3 RCTs)	⊕○○○ Very Low	Early integration of Palliative care with standard oncological care likely results in a large increase in FACT.	
FACT-G	Mean score 71.73 RD 0.42% higher (2.47 lower to 3.25 higher)	-	289 (2 RCTs)	⊕○○○ Very Low	Early integration of Palliative care with standard oncological care may increase harm with little to no effect on quality of life but the evidence is very uncertain.	
Quality of Life assessed with TOS	Mean score 18.52 RD 0.53% higher (2.33 higher to 4.63 higher)	-	469 (3 RCTs)	⊕○○○ Very Low	Early integration of Palliative care with standard oncological care may increase harm with little to no effect on quality of life but the evidence is very uncertain.	
Overall Survival	The median overall survival was 10.3 months RD 0.37% months higher (2.68 higher to 3.63 higher)	-	377 (3 RCTs)	⊕○○○ Very Low	The evidence suggests early integration of Palliative care with standard oncological care increases overall survival.	

Multimodal intervention compared to Usual care for management of dyspnoea						
Patient or population: Advanced lung cancer patients with dyspnoea						
Intervention: Multimodal intervention (Drug and non-drug)						
Comparators: Standard of Care						
Outcome	Anticipated Absolute Effect ^a (95% CI)	Relative Effect (95% CI)	No. of Participants (Studies)	Certainty of the Evidence (GRADE)	Comments	
Improvement in Dyspnoea						
Standard rating scale (0-10)	Mean score 4.03 MD 0.4 lower (0.95 lower to 0.4 higher)	-	258 (3 RCTs)	⊕○○○ Very Low		
Modified Medical Research Council (mMRC) Scale	Mean score 1.38 MD 0.03% higher (0.87 lower to 0.33 higher)	-	322 (3 RCTs)	⊕○○○ Very Low		
Medical Research Council Dyspnoea Scale (MRC-DSS)	Mean score 3.02 MD 0.27 lower (0.77 lower to 0.23 higher)	-	216 (2 RCTs)	⊕○○○ Very Low		
Cancer Dyspnoea index (CDI)	Mean score 1.79 MD 0.34 lower (0.72 lower to 0.38 higher)	-	269 (3 RCTs)	⊕○○○ Very Low		
10cm visual analogue scale	Mean score 1.78 MD 0.53 lower (2.49 lower to 0.39 higher)	-	102 (1 RCT)	⊕○○○ Very Low		
Dyspnea-12	Mean score 14.93 MD 0.25 lower (4.3 lower to 0.3 higher)	-	104 (1 RCT)	⊕○○○ Very Low		
Borg Scale	Mean score 13.6 MD 0.48 lower (1.89 lower to 0.47 higher)	-	24 (1 RCT)	⊕○○○ Very Low		
Drug score	Mean score 2.6 MD 0.1 lower (2.9 lower to 0.7 higher)	-	59 (1 RCT)	⊕○○○ Very Low		
Effect on Performance Status						
EWING in minutes	Mean score 49.0 MD 4.1 higher (4.53 lower to 12.53 higher)	-	89 (1 RCT)	⊕○○○ Very Low		
Activity (percentage time walkable)	Mean score 45.0 MD 1.62% higher (1.21 higher to 2.03 higher)	-	191 (1 RCT)	⊕○○○ Very Low		
ECOG	Mean score 1.71 MD 0.15% higher (4.42 higher to 5.46 higher)	-	105 (2 RCTs)	⊕○○○ Very Low		
Gold-Standard Lung Test Physical Activity Questionnaire	Mean score 11.19 MD 1.1 higher (3.29 lower to 0.45 higher)	-	247 (1 RCT)	⊕○○○ Very Low		
Bathel index	Mean score 58.31 MD 0.6 higher (1.0 higher to 0.36 higher)	-	106 (1 RCT)	⊕○○○ Very Low		
Quality of Life						
BORG-DSS-CDI-Overall health status	Mean score 45.88 MD 4.3 higher (2.27 higher to 6.34 higher)	-	141 (1 RCT)	⊕○○○ Very Low		
FACT-L	Mean score 91.4 MD 0.6 higher (1.23 higher to 1.97 higher)	-	191 (1 RCT)	⊕○○○ Very Low		
Chronic Respiratory Questionnaire-Bathel	Mean score 4.72 MD 0.36 higher (0.39 lower to 0.76 higher)	-	94 (1 RCT)	⊕○○○ Very Low		
Chronic Respiratory Disease Questionnaire-short form fatigue score	Mean score 8.8 MD 0.2 higher (0.49 higher to 0.39 higher)	-	34 (1 RCT)	⊕○○○ Very Low		

Multimodal intervention compared to psychotherapeutic care alone for newly diagnosed cases with lung cancer						
Patient or population: Patients with Lung Cancer						
Intervention: Multimodal intervention (Drug and non-drug)						
Comparators: Psychotherapeutic Care						
Outcome	Anticipated Absolute Effect ^a (95% CI)	Relative Effect (95% CI)	No. of Participants (Studies)	Certainty of the Evidence (GRADE)	Comments	
Improvement in Symptom Score						
Depression assessed with MADRS	The mean depression was 6.99 MD 0.48% higher (0.14 higher to 0.22 higher)	-	94 (1 RCT)	⊕○○○ Very Low	Lower depression with multimodal approaches	
Depression assessed with PHQ-4	The mean depression was 1.1 MD 0.5 lower (1.26 lower to 0.26 higher)	-	153 (1 RCT)	⊕○○○ Very Low		
Depression assessed with PHQ-9	The mean depression was 3.84 MD 0.61% higher (2.43 higher to 0.39 higher)	-	108 (1 RCT)	⊕○○○ Very Low	Lower depression with multimodal approaches	
Depression assessed with VASAS	The mean depression was 6.1 MD 0.22% higher (0.21 higher to 0.22 higher)	-	94 (1 RCT)	⊕○○○ Very Low	Lower depression with multimodal approaches	
Depression assessed with DCL-20	The mean depression was 8.97 MD 0.24 higher (0.11 higher to 0.46 higher)	-	191 (1 RCT)	⊕○○○ Very Low	Lower depression with multimodal approaches	
Quality of Life						
Quality of Life assessed with FACT-L	The mean quality of life was 94.89 MD 0.48% higher (0.47 higher to 0.89 higher)	-	23 (1 RCT)	⊕○○○ Very Low	Higher QoL with multimodal approaches	
Quality of Life assessed with EORTC QLQ-C30	The mean quality of life was 56.8 MD 2.8 higher (5.88 lower to 11.8 higher)	-	67 (1 RCT)	⊕○○○ Very Low		
Quality of Life assessed with EQ-5D	The mean quality of life was 10.6 MD 0.09% higher (1.11 higher to 1.07 higher)	-	179 (2 RCTs)	⊕○○○ Very Low	Higher QoL in three recent multimodal approaches	

Recommendations

Key Question	Recommendation	Rationale/Justification	In patients with advanced lung cancer experiencing dyspnoea, how effective is multimodal treatment compared to drug therapy alone in terms of improvement in dyspnoea?	Multi-modal treatment is recommended as compared to drug therapy alone for treatment of dyspnoea in patients with advanced lung cancer.	The evidence showed moderate desirable effects with negligible additional costs, and cost-effectiveness probably favouring the use of multimodal interventions. The panel judged that the benefits outweigh minimal harms, supporting a strong recommendation.	For patients with newly diagnosed lung cancer, how efficacious is multimodal approach to managing the cluster of insomnia, fatigue and depression, compared with psycho-social/psychotherapeutic care alone?	Multimodal Approach of treatment is recommended in comparison to treatment with Psychotherapeutic Care alone for patients with lung cancer.	The evidence showed moderate desirable effects with trivial harms, alongside acceptability, feasibility, and cost-effectiveness probably favouring multimodal approach in managing the symptom cluster. The anticipated benefits outweigh potential downsides, supporting a strong recommendation.
For patients with advanced lung cancer, does early integration of palliative care with standard oncological care compared to standard oncological care alone improve patient outcomes?	Strength: Strong Certainty of evidence: Very Low	The evidence showed moderate desirable effects, along with acceptability, feasibility, and cost-effectiveness, supporting the early integration of palliative care. Despite very low certainty of evidence, the panel judged that the benefits clearly outweigh minimal harms. Given strong patient values and preferences for early supportive care, a strong recommendation was issued, while recognizing the need to address moderate resource requirements and potential equity concerns during implementation.	Strength: Strong Certainty of evidence: Very Low			Strength: Strong Certainty of Evidence: Very Low		