Literature Review and Research Gap – Ethical AI Use in Oncology

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# Literature Review

Recent publications have begun to explore the ethical, clinical, and regulatory implications of large language models (LLMs) in healthcare. Key themes include:  
  
- The promise of LLMs in improving patient communication, education, and clinical decision support (Lim & Hwang, 2024; Madduri et al., 2023).  
- Growing concerns about misinformation, hallucinations, and the need for human oversight in clinical applications (Smith et al., 2024; Brown et al., 2024).  
- Oncologist perspectives highlighting the ethical need for explainability, patient consent, and responsibility in AI-assisted care (Johnson et al., 2023).  
- Emerging attention to the emotional and psychological impact of AI use in sensitive contexts like palliative care (Lee et al., 2024).  
  
However, the current literature largely focuses on clinical applications and regulatory frameworks, with limited attention to the emotional and cognitive risks of human-AI interaction in grief-intensive or cognitively vulnerable contexts, such as oncology.

# Identified Gap in the Literature

While existing research addresses technical and regulatory challenges, there is a critical gap in understanding how emotionally intelligent LLMs may interact with:  
  
- Grief-stricken patients and families navigating life-limiting diagnoses.  
- Cognitively vulnerable clinicians, such as those experiencing moral injury, burnout, or emotional overload.  
  
This study seeks to fill that gap by investigating the emotional, cognitive, and psychological implications of LLM use in oncology—starting with reflective narrative and expanding toward ethical framework development.