The Therapeutic Efficacy of Art Interventions on Cancer Pain
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INTRODUCTION
- 35–96% pain prevalence, > 50% with advanced disease
- Contributions/sources of distress: physiological, psychological, emotional, spiritual, social, cultural
- Pain subjective and challenging to evaluate
- Current treatment
  - W.H.O. analgesic ladder guideline
  - < 50% effective pain management
- Need for comprehensive pain management
- 80% oncology patients utilize integrative therapy
  - Relaxation
  - Acupuncture
  - CBT

PICO
Population: Oncology patients
Intervention: Art Interventions
Comparison: Treatment plans that do not utilize art interventions
Outcome: Effects on pain

Clinical question: Does art-making intervention decrease pain outcomes in cancer patients compared with treatment plans that do not utilize it?

METHODS
- PubMed and MeSH terms used to generate article search
- Search terms included “pain”, “cancer”, and “art therapy”
- 9 results yielded at time of search
- No further refining due to limited quantitative research

ANALYSIS
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<th>Experimental Design</th>
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| Relieving Symptoms in Cancer: Innovative Use of Art Therapy Nainsi et al | Quasi-experimental | n = 50  
  - 18 years or older  
  - Cancer diagnosis  
  - Ability to communicate in English  
  - Capable of attending 1-hour art session | Edmonton Symptom Assessment Scale (ESAS)  
  - Spielberger State-Trait Anxiety Inventory (STAI) |
| Use of Art-Making Intervention for Pain and Quality of Life Among Cancer Patients Kim et al | Systematic review  
  - 2 RCTs  
  - 11 quasi-experimental  
  - 4 of 13 studies evaluated pain; n = 237 | n = 717  
  - 18 years or older  
  - Cancer diagnosis  
  - Used painting, drawing, other art making intervention  
  - Quantitative methods  
  - Measured pain, QOL, well-being | Medical Outcomes Study-Short Form Health Survey SF-36 ESAS  
  - Yale’s quality rating scale |
| A brief bedside visual art intervention decreases anxiety and increases pain and mood in patients with hematologic malignancies Saw et al | Pilot study  
  - Nonrandomized trial  
  - Inpatient cohort | n = 21  
  - 18 years or older  
  - Any hematologic malignancy  
  - Determined well enough to participate in 30 min art intervention | Visual analog scales (VAS)  
  - State-Trait Anxiety Inventory (STAI)  
  - Positive and Negative Affect Schedule (PANAS) |

Assessment Instruments:
- ESAS: Rates 9 symptoms on a 0-10 scale: pain, tiredness, nausea, depression, anxiety, drowsiness, lack of appetite, well being, shortness of breath
- STAI: State-Trait Anxiety Inventory: evaluating feelings of apprehension, tension, nervousness, worry at time of intervention
- VAS: Continuous pain scale 0-10 with verbal descriptors
- PANAS: 5-point mood scale measuring positive and negative affect

RESULTS
- Nainsi et al  
  - Statistically significant reduction in 8 of 9 ESAS symptoms including pain  
  - 90% reported positive perspective  
  - 95% calming and relaxing  
  - 6% reported no effect  
- Kim et al  
  - 2 of the 4 studies evaluating pain reported statistically significant improvement  
  - 1 study reported no statistical difference compared with control group  
  - 1 study reported mixed results  
- Saw et al  
  - Post BVAI mean VAS pain score improved significantly by 35.1% for a p-value = .017  
  - High pain scores, VAS > 5, revealed 39.4% decrease in pain  
  - 95% reported a positive experience  
  - Pain only variable to meet statistical sampling size of 80% power

CONCLUSION
- Pain, anxiety, quality of life, and other cancer related symptoms improved with art-making intervention
- Significant decrease in reported pain in majority of studies
- Low risk, cost-effective
- Further empirical research indicated before art therapy recommended
- Improved study design would increase confidence in data results
  - RCTs
  - Larger/more diverse study cohort
  - Standardized art interventions
- Future directions
  - Investigate physiological mechanisms art exerts on mind/body
  - Treatment of other chronic illness and degenerative diseases

LIMITATIONS
- Weak study design
  - Small sample sizes
  - Few RCTs
  - Poor patient demographic diversity; primarily female
  - Large refusal rate during study recruitment
  - Heterogeneity among art-making interventions
  - Failure to evaluate pain exclusively/comprehensively

REFERENCES