

## **Randomized clinical trial on effectiveness of tranquilizing classical music on pain, anxiety and mood modulation in cancer patients**

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**Abstract: 240 words**

**Introduction:** Pain is the commonest and most distressing symptom suffered by cancer patients. It is closely associated with anxiety and depression and is also frequently not alleviated with pharmacotherapy alone. Although a myriad of therapeutic effects of music have been known for years, they have not been studied on Sri Lankan cancer patients.

**Objective:** To assess the short-term effect of tranquilizing classical music on pain, anxiety and mood modulation in cancer patients.

**Methods:** A randomized crossover clinical trial was carried out in institutionalized cancer patients (n= 23). Statistical comparison of subjective (Visual Analogue Scale) values for pain, anxiety and mood as well as objective measurements of sympathetic over-activity (vital parameters and pupillary size) which are closely correlated to pain was carried out on two consecutive days without and with

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administration of music. Effect was assessed immediately following administration.

**Results:** Statistically significant improvements were noted in all three subjective parameters; namely pain, anxiety and mood; ( $p < 0.05$ ) with administration of music when compared to regular symptomatic medication alone. There have also been statistically significant reductions in surrogate endpoints; the pupillary size and diastolic arterial pressure ( $p < 0.05$ ). Declines noted in the heart rate and the systolic blood pressure were insignificant.

**Conclusion:** Tranquilizing classical music shows a significant effect as an adjunct to on-going therapies in the management of pain, anxiety and low mood in cancer patients. Further studies are required to determine the duration that these favourable effects last.