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

Fernando GVMC; Wanigabadu LU; Vidanagama B; Samaranayaka TSP

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
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.