SIOG 2017 - Abstract Submission

Track 5: Geriatric assessment, nursing/allied health and patient care

Nursing

O03

THE EFFECT OF LIVE MUSIC ON POSTOPERATIVE PAIN IN ELDERLY PATIENTS

H. van der Wal- Huisman [1,*], E. Heineman [1], B. L. van Leeuwen [2]

[1]Surgery, [2]Surgical oncology, University Medical Center Groningen, Groningen, Netherlands

Please indicate how you prefer to present your work if it is accepted: Oral or Poster Presentation

I submit my abstract to be considered for the following award: None

Introduction: Many patients experience pain after surgery. Pain has a negative influence on physical and mental recovery which may result in a variety of postoperative complications and functional impairment. Music is an universal and non-pharmaceutical intervention for pain and therefore seems suitable for the growing number of elderly patients needing (oncological) surgery as treatment. However, the effect of (live) music on postoperative pain among elderly patients is unknown.

Objectives: In this pilot study, which is a unique collaboration between a university medical center and a conservatoire, we obtained experience in performing live music for elderly patients after surgery and examined the effects on postoperative pain.

Methods: A pilot study, consisting of six standalone weeks, with a pre-posttest design with follow-up was conducted between September 2015 and May 2016 among postoperative patients, aged ≥60 years. The intervention contained: live music, person centered improvisation and existing repertoire, performed by professional musicians, from the conservatoire, for approximately 10-15 minutes, one session a day on three different surgical wards. Pain was measured with a Visual Analogue Scale (VAS; score 0-10) before the music session, 30 min and3 hours after the session. Higher VAS score indicated more pain. The control group, measured in separated weeks but on the same times and the same wards, consisted of patients who did not receive the intervention. Patients could participate with a maximum of seven days. Wilcoxon Signed Rank Test was performed to determine a difference within the groups and the Mann Whitney U test to compare VAS scores between both groups.

Results: Eighty-eight music sessions among 38 patients, mean age 70.5 years (sd 6.5), were measured and 90 session were measured among 46 patients, mean age 70.3 years (sd 6.6) in the control group. The average participated music sessions was 2.32 (sd 1.78). VAS scores decreased within the music group, indicating less pain, between pretest and posttest, and, pretest and follow-up (p.000). No difference was found within the control group. There was no difference in pre-test scores between the music and control group (p.56), however there was on the posttest scores (p.013) and follow-up (p.003).

Table: VAS-scores

	Music group (mean)	**Control group (mean)**	**p- value**
Pretest score	1.25 (sd 1.85)	1.49 (sd 2.14)	.56
Posttest score	0.66 (sd 1.49)*[1]	1.41 (sd 2.12)	.013*
Follow-up score	0.52 (sd 1.01)*[1]	1.42 (sd 2.12)	.003*

[1.] sign. difference within music group between pre-test vs posttest and pre-test vs follow-up

Conclusion: Music has a positive effect on experienced pain among elderly patients after surgery and is therefore suitable as an non pharmaceutical intervention. Given the results of this pilot study, further research in a larger population is necessary to determine whether music is of influence on the dosage of pain medication.

Disclosure of Interest: None Declared

Keywords: elderly patients, music, pain, postoperative