

Commentary on “Music Does Not Alter Anxiety in Patients with Suspected Lung Cancer Undergoing Bronchoscopy: A Randomised Controlled Trial” – European Clinical Respiratory Journal

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Introduction

Not only may the prognosis of lung cancer provoke fear in patients with suspected lung cancer undergoing bronchoscopy, but also the thought of undergoing bronchoscopy may provoke fear [1]. This can be fear of pain, of shortness of breath and also fear of death in connection with the bronchoscopy (Figure 1).

The aim of the study was to measure the effect of “MusiCure -music as medicine”, on bronchoscopy-related anxiety. We hypothesised that MusiCure reduces bronchoscopy-related anxiety. MusiCure is music composed by the danish composer Niels Eje. There are contradictory findings both on the effect of MusiCure on anxiety and of the effect of music on bronchoscopy-related anxiety [2-5].

The patients included in our study had state-anxiety scores ranging from no anxiety to considerable anxiety, with a median state anxiety score at 39 (Spielberger’s State-Trait Anxiety Inventory - STAI) (Figure 2).

It can be questioned whether some of the most anxious patients declined participation due to their anxiety and whether if included the median anxiety score would be higher.

Participants completed STAI-State on admission, after 10 minutes with or without music, and at discharge. The median STAI-State score after listening 10 minutes to music (MusiCure) or no sound, through earplugs, before bronchoscopy, was 35 in the music group versus 43 in the control group ($p = 0.03$). Post-hoc analysis with multiple regression revealed treatment group as insignificant, but sex and baseline anxiety as significant predictors of STAI-State level in the operating theatre.

This calls for attention to confounders in this field of research, and sex is a considerable confounder. Either men are less anxious, or they are less willing to admit their anxiety. Our control group contained a more anxious female group which was not detected on admission.



Figure 1: Patient from Department of Respiratory Medicine, Bispebjerg Hospital, who had supporting colleagues who printed this t-shirt for her. This patient expressed major worries about the bronchoscopy she had to undergo.

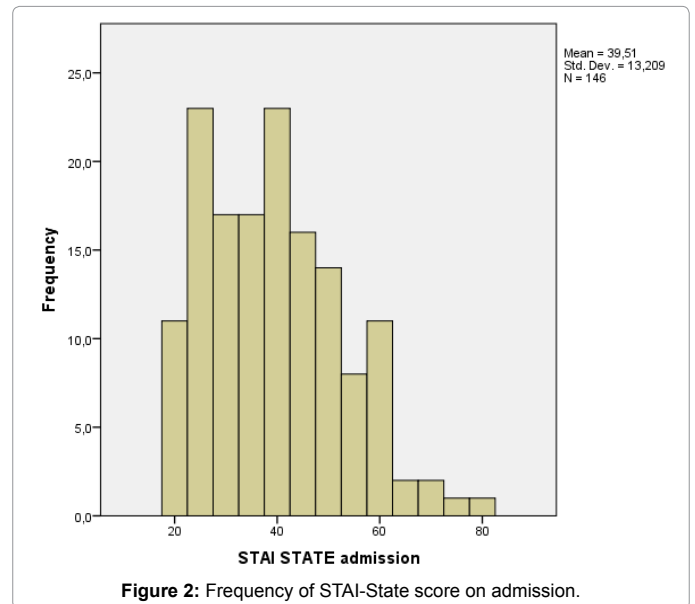


Figure 2: Frequency of STAI-State score on admission.

A sample of p-cortisol was taken on admission, and 15 and 60 minutes after termination of bronchoscopy. There were no significant differences between the sexes on p-cortisol at any time, but women reported a significantly higher anxiety score on STAI-State throughout the whole study.

Limitations of the current study are, amongst other, the length of the music intervention before STAI-State was administered. Secondly, that researcher-selected music was used instead of patient-selected music and thirdly, that p-cortisol was measured after midazolam and fentanyl were administered [6-10].

We concluded that listening to “MusiCure-music as medicine” for 10 minutes does not alter anxiety. No negative side effects, though, were reported from our participants. The participants who listened to MusiCure reported significantly better perception of the sounds in the

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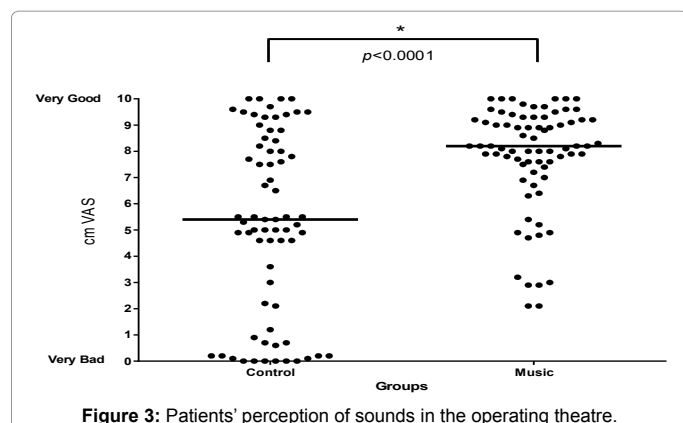


Figure 3: Patients' perception of sounds in the operating theatre.

operating theatre (Figure 3), so although listening to MusiCure before bronchoscopy does not alter anxiety, it can enhance patients' comfort and experience of the environment in the operating theatre.

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