

# THE EFFECT OF MUSIC ON COLONOSCOPY (MUSICOL): A RANDOMIZED CONTROLLED TRIAL



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## INTRODUCTION

Patients may experience anxiety and discomfort prior to and during colonoscopies. In 2018, only 69% of adults were up to date on colon cancer screening. Patient experience and subsequent adherence to screenings may be improved with music.

Our study aims to assess if playing music before and during colonoscopies improves the patient experience, willingness to repeat the procedure in the future, and endoscopist performance.

## METHODS

- Adult patients undergoing screening colonoscopy
- Randomized into a No-music vs. Music group
- Primary objective:
  - Music vs No-Music group
    - Anxiety scores
    - Overall patient experience
    - Willingness to undergo another procedure in the future
    - Endoscopist performance
- Chi-squared and Wilcoxon two-sample tests

## RESULTS (Table 1)

Demographic, anxiety and pain scores	Music group (n=40)	Control group (n=39)	P-value
Age	55.6	57.8	0.22
Male (n, %)	18 (45.0%)	16 (41.0%)	0.72
Ethnicity (Caucasian, Hispanic, AA, Asian)	6/9/23/2	5/6/26/2	0.83
Hx of prior c-scope (n, %)	20 (50.0%)	19 (48.7%)	0.90
Hx of abdominal Sx (n, %)	12 (30.0%)	8 (20.5%)	0.33
Anxiety medication use (n, %)	1 (2.5%)	1 (2.6%)	0.99
pre procedural pain ( $\bar{x}$ )	0.13	0.28	0.39
post procedural pain ( $\bar{x}$ )	0.28	0.23	0.64
Pre-procedure anxiety level ( $\bar{x}$ )	10.7	12	0.25
<b>Endoscopists performance measurements, sedation use, and primary outcomes</b>			
Time to cecum (mins)	11.9	10.1	0.43
Procedure time (mins)	33.0	31.1	0.38
Adenoma Detection (n, %)	15 (37.5%)	14 (35.9%)	0.88
Midazolam dose (mg)	3.94	4.03	0.80
Fentanyl (mg)	79.4	85.3	0.43
Future Willingness (x)	4.77	4.73	0.95
Overall experience rating ( $\bar{x}$ )	4.84	4.67	0.34

## RESULTS

There was no statistically significant difference in study outcomes such as patient future willingness, patient overall satisfaction, adenoma detection rate, time to reach cecum, procedure time, sedative dosage between the music group and control group (Table 1)

## CONCLUSIONS

- No statistically significant differences
  - Music vs No-Music
    - Overall patient experience
    - Future willingness
    - Endoscopist performance

Further patient recruitment is necessary:

- Increase sample size
- Achieve adequate power
- Assess patient experience, adherence to screening programs, and endoscopist performance

## REFERENCES

1. Joseph DA, et al. *Vital Signs: Colorectal Cancer Screening Test Use — United States, 2018*. MMWR Morb Mortal Wkly Rep 2020;69:253–259.