

# What Factors are Associated with Self-Discharge from Postoperative Therapy After Distal Radius Fractures?

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## Introduction

- Postoperative therapy is an essential component for recovery in distal radius fractures.
- Patient adherence has been linked to sociodemographic factor, revealing a potential area of important research.
- In Orthopedic patients, it has been shown that there are worse post-operative metrics like pain, range of motion, and perceived treatment progress in patients who are nonadherent to postop management.
- Consequently, this study sought to investigate sociodemographic, insurance, and health factors that may be associated with therapy nonadherence.



## Methods

- Retrospective review of 86 patients with isolated distal radius fractures managed operatively and started on postoperative hand therapy.
- Sociodemographic factors, comorbidities, and discharge therapy notes were extracted from 2014-2019.

## Results

- Patients attended a mean (SD) of 13.2 (8.9) therapy sessions over a mean (SD) of 66.1 (37.4) days postop
- 17 (19.7%) patients were lost to follow up and were self discharged.
- No sociodemographic factors were associated with self-discharge ( $p > 0.05$ ).
- Associations with self-discharge:
  - Smoking (OR = 4.4,  $p < 0.05$ )
  - Depression (OR = 6.6,  $p < 0.05$ )
  - Hyperlipidemia (OR = 0.1,  $p < 0.05$ )
  - Anxiety (OR = 4.4,  $p < 0.05$ )

Table 1: Associations between patient factors and postop hand therapy adherence

**Table 1** Associations between demographic factors, socioeconomic factors, and comorbidities with postoperative therapy adherence (lost to follow-up) (N = 86).

	Univariable OR [95% CI]	Multivariable OR [95% CI]*
Age	0.97 [0.93; 1.00]	-
Smoking	4.37 [1.44; 13.26]	6.86 [1.83; 25.75]
No insurance	3.94 [0.93; 16.68]	-
Number of comorbidities	1.45 [0.94; 2.23]	-
Hyperlipidemia	0.13 [0.02; 1.00]	0.12 [0.01; 1.13]
Anxiety	4.42 [1.44; 13.53]	-

Abbreviations: OR = odds ratio

\*Multivariable OR [95% CI] based on forward stepwise regression.

## Conclusions

- Smoking, depression and anxiety may be important risk factors of non-adherence to postoperative therapy.
- There may be a mental health and psychiatric component to patients who can tend to be lost to follow up in the postoperative period.
- These findings may assist surgeons in identifying patients who may require additional clinical support or encouragement to enhance therapy engagement.

Thank you the Vanderbilt Institute for Clinical and Translational Research (VICTR) and the Research Derivative team for their contribution and help with funding and data extraction.