



Management of Chronic Low Back Pain for Inmates

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INTRODUCTION

Background

- 80% population will experience low back pain in their lives; 5% will develop chronic low back pain.
- Low back pain fourth most prevalent disease in inmates on initial intake.
- Correctional facility where CSP conducted > 65% Chronic low back pain (CLBP).

Significance

- Prescribed physical therapy exercises are often neglected by 70% patients:
- Participants (86%) had not development home routine of exercise for management of back pain.
- Inmates in facility (68%) using alcohol, meth or heroin with opioids (Norco, Oxycodone, Fentanyl, etc.)
- Participants obtaining medications and street substances from nonmedical professionals

PICOT

- P) For inmates with chronic low back pain,
- I) how do non-pharmacological pain management methods such as stabilization exercises,
- C) compared to pharmacological pain management methods,
- O) affect exacerbated episodes of their symptoms
- t) over a two-month period?

METHODOLOGY

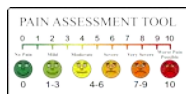


Intervention

- Tracking of daily prescribed dosages of opioid pain relief medications throughout a 60 day intervention period of 51 inmates at a California Jail.
- Biweekly tracking of core strengthening stabilization exercises, pain levels, and clinical impact on the need for opioid pain relief medications.

Instruments

- BMI, Electronic Medical Record, SPSS, Likert pain scale
- WebMD Pain Coach app if unclear on correct return demonstration of Core strengthening exercises
- Bananas, milk, extra time on the exercise yard, group leaders, and work



RESULTS

	Paired Differences							
	Mean	SD	SEM	95% Confidence Interval of the Difference		t	df	Sig (2 tailed)
Pre-project Opioid Use minus Post-project Opioid Use	72.08	45.848	6.420	59.18	84.97	11.227	50	0.000

M = Mean, SD = Standard deviation, SEM = Standard error of mean, t = Student's t test, df = Degrees of freedom, Sig = p-value

- Participants were all male
- 41.2% Caucasian, 35.3% African American, 19.6% Latino, 2% Asian, 2% American Indian.
- The mean age was 40 years old.
- The BMI categories results were 39% Normal, 33% Overweight, 22% Obese, and 6% Morbid Obese.
- In this data set opioid use was decreased by an average of 72%. The 95% confidence interval for the mean percentage change in opioid use is 59.18% to 84.97%.
- Core stabilization exercises were found to have a significant impact on chronic low back pain (CLBP). Data analysis indicated a 72% decrease in daily prescribed opioid use by inmates in a 60-day period. A two-tailed match paired t-test produced a t statistic of 11.23 with corresponding p-value = 0.000. Implementing the intervention of core stabilization exercises significantly reduced opioid dosage and use.

Therefore, it can be concluded that core strengthening exercises intervention did show a significant decrease in the use of opioids in chronic low back pain patients.

Limitations

- Ten participants partially completed the study for several reasons: loss of interest, mental health, and physical limitations due to comorbidities.
- Participant-provided information on the number of years they have had a diagnosis of chronic low back pain contained bias.
- Some participants were poor historians, do not see a provider routinely, have not been diagnosed properly or given the diagnosis of chronic low back pain (CLBP) by licensed medical professional.
- After withdrawal protocols ended, the brain challenged the five senses.

DISCUSSION

- With the increase of core strengthening the inmates with CLBP may reduce their reliance upon opioids for pain medication and may be cleared for work, enhancing mobility, relieving pain, and improving their quality of life.
- Connection(s) to literature the cost of CLBP to the healthcare system may be reduced annually by up to 87% with the implementation of musculoskeletal strengthening exercises.
- Exercises be offered prior to opioid implementation for CLBP Protocol written

CONCLUSIONS

- Prevention is the key to CLBP and evidenced based management may allow an individual to avoid exacerbation periods and the use of opioid
- Opioids have been removed from the formulary, so if needed require a FEQ to be filled out.
- Support of stakeholders is needed to continue the implementation of this CSP and to allow the participating inmates of the project to continue.
- Decrease costs for Chronic Low back pain from \$650,000 in the facility to \$350,000 annually.
- Pilot Back Health Maintenance Program implemented at Travis AFB in conjunction with David Grant Medical Center Physical Therapy Department.

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