



## The feasibility and efficacy of a caretaker-administered massage-cum-moxibustion program for chronic pain relief

## Abstract

**Objectives:** The aim of this study was to determine the feasibility and efficacy of a simple and convenient caretaker-administered moxibustion-cum-massage of relieving chronic pain that lasted longer than 3 months. We expected that such simple and convenient home administered moxibustion device could be a feasible way to enhance pain relief.

**Methods:** Seventy eight participants with chronic pain were randomly distributed to experiment and control group by computer generated numbers. Participants had to fill out a battery of questionnaire demographics, pain, appetite and depression at four different time points such as baseline ( $T_0$ ), 5-days after baseline ( $T_1$ ), immediately post-intervention ( $T_2$ ) and 5-days following intervention ( $T_3$ ). Participants would receive 2 moxa stick per day for 5 consecutive days of massage-cum-moxibustion procedure provided by trained caregivers/helper.

**Results:** When compared with control group, the subjective pain level of the experimental group was significantly lowered by a mean of 1.22 with a  $\pm$  2.44 standard deviation (p = 0.04); the appetite of experimental group was also marginally improved (p = 0.07). The depression symptoms of experimental group were also improved when compared with baseline.

**Conclusion:** The results of this study indicate that massage-cum-moxibustion was a relatively effective alternative treatment on top of participant's regular pain relief regime to relief pain. Compared with control group, the appetite of experimental group was also marginally improved. Although the depression level in experiment group was not significantly improved, the trends of improvement were found compared with baseline levels. The short time frame of 5 days is one of the limitations of this study. Future studies could consider a longer period of intervention time.

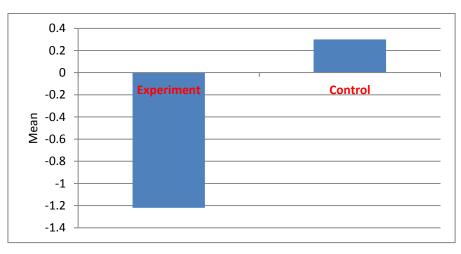
## **Figures and Tables**

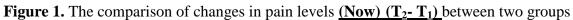
	Total	Experimental Group	Control group	P Value
	(n= 78)	(n=40)	(n= 38)	
Age (years)	$59.21 \pm 3.84$	$59.25\pm3.77$	$59.16\pm3.96$	.92
Sex				
Female	69 (88%)	35 (88.5%)	34 (85%)	.79
Male	9 (12%)	5 (12.5%)	4 (15%)	
Pain Level				
Now		$5.75 \pm 1.92$	$5.16 \pm 1.79$	.17
Last Week		$6.70\pm2.23$	$5.97 \pm 2.22$	.16
SNAQ Score Average		$14.50 \pm 1.49$	$14.79 \pm 1.36$	.37
GDS Score Average		$5.88 \pm 3.25$	$6.42\pm4.18$	.52

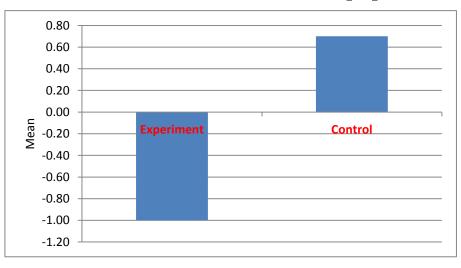
Table 1. Characteristics of Participant at Baseline<sup>1</sup>

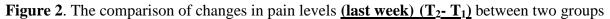
SNAQ, simplified nutritional appetite questionnaire; GDS, Geriatric Depression Scale; SD, Standard Deviation

<sup>1</sup> All values are mean  $\pm$  standard deviation









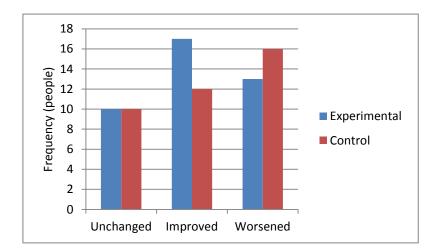


Figure 3. Difference of reported highest pain level <u>now</u>  $(T_2 - T_1)$  between experimental and control groups

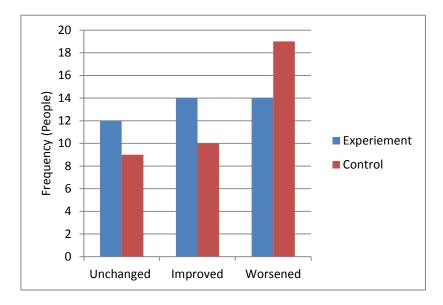


Figure 4. Difference of reported highest pain level <u>last week</u>  $(T_2 - T_1)$  between experimental and control groups