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Introduction

Internet-based treatment programs present a solution for providing access to pain management for those unable to access clinic-based multidisciplinary pain programs. Pain research often focuses on populations with one site of pain, and those with complex presentations are often excluded despite the fact that up to 85% of the chronic pain population report multi-site pain⁽¹⁻³⁾. Increasing complexity, including the number and area of body regions of pain, has a negative impact on outcomes^(1,-3). To develop online programs that are patient centred and effective, there is a need to understand the population so that programs can offer the best option to fit the person with pain. Reboot online was the first multidisciplinary online pain program and has been shown to be effective and scalable^(4,5).

Aim: to investigate the body regions of pain and their association with psychosocial measures for pain of participants enrolled in "Reboot online".

Materials and methods

Study design: Retrospective cohort study

Study setting: THIS WAY UP (thiswayup.org.au) online programs

Participants: Participants enrolled in "Reboot online"

>18 years

Access to internet and computer

Outcome measures

Clinical measures

Primary

Pain Self-Efficacy Questionnaire (PSEQ)⁽⁶⁾

Tampa Scale for Kinesiophobia (TSK)⁽⁷⁾

Secondary

Brief Pain Inventory, Short Form (BPI)⁽⁸⁾

Pain Disability Index (PDI)⁽⁹⁾

Patient Health Questionnaire-9 (PHQ-9)⁽¹⁰⁾

Kessler-10 Psychological Distress Scale (K-10)⁽¹¹⁾

Body regions

The specific regions and number of regions of pain were evaluated using Question 1 of the BPI by coding for nine body regions: lower limb, lumbar spine, abdominal, trunk/thoracic spine, pelvis, upper limb, cervical spine, headache/head and face.

Participants were categorised into 4 groups according to the number of body regions of pain: 1, 2, 3 or >3.

Data Analysis: One way analysis of variance was conducted to explore differences between the number of body regions and baseline outcome measures.

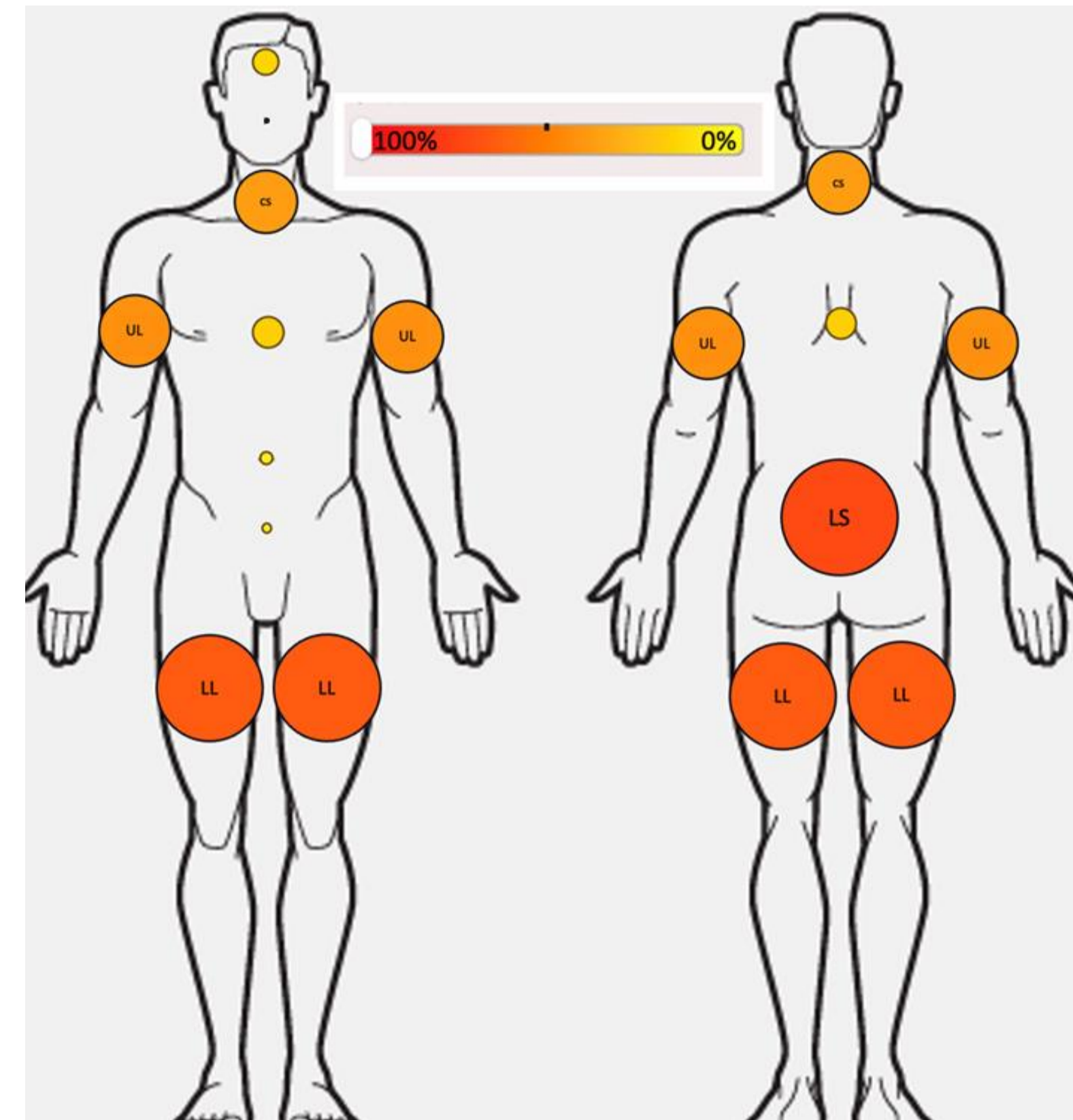
Conclusions

This study gives us a better understanding of the body region profile and association with clinical measures of patients enrolled in online pain management programs. The majority of patients had multisite pain.

Increasing number of body regions of pain were associated with worse psychosocial outcomes at baseline, except for kinesiophobia which was high for all groups. Clinicians and researchers need to consider the number of body regions when assessing and developing treatment management plans for persons experiencing chronic pain.



Results



Self-reported body regions of chronic pain*

Body region	N (%)
Lumbar spine	69.98%
Lower limb	63.84%
Upper limb	43.21%
Cervical spine	38.01%
Trunk	19.03%
Headache	15.83%
Abdomen	8.24%
Pelvic	6.39%
Face	2.20%

Number of reported body regions	N (%)
1	472 (23.6)
2	592 (29.6)
3	405 (20.2)
4	295 (14.7)
5	173 (8.6)
6	53 (2.7)
7	7 (0.4)
8	4 (0.2)
9	1 (0.1)

*Note: Participants were able to nominate more than one region of pain

Baseline characteristics n=2002

Age mean ± SD 48.56 ±14.35
range 18-90

Gender

Female, Male 67, 30,
undisclosed % 3

Clinical Outcomes Mean ±SD

PSEQ 25.66 ±13.61

TSK 40.63 ±8.47

K-10 26.81 ±8.31

PHQ-9 12.17 ±6.69

BPI_{sev} 5.58 ±1.77

BPI_{int} 6.46 ±2.26

PDI 41.15 ±15.77

Number of body regions and clinical measures

Clinical measure		Number of body regions		
		2	3	>3
Clinical measure	K-10	*	*	**
	PHQ-9	*	*	**
	BPI _s	*	*	**
	BPI _{int}	*	*	**
	TSK	*	*	**
	PSEQ	*	*	**
	PDI	*	*	**

* Sig difference between 1 body region
* Sig difference between 2 body regions
* Sig difference between 3 body regions

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Further information

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