



A cross-sectional survey of health professionals across Australia and New Zealand to determine what outcome measures are important from a clinical perspective post hand burn injury

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Background

Outcome measures are used in health care to measure clinical practice, efficiencies and determine quality¹. The Burns Trauma Rehabilitation: Allied Health Practice Guidelines² advocates for the collection of outcome measures post burn injuries across different time points post recovery. The guidelines support using outcome measures to collect outcomes that are quantifiable and comparable over time for both individuals and groups². A recent systematic review found 34 studies which reported 32 different outcome measures for use post hand burn injuries with few of the outcomes measures validated for use specifically for hand burn injuries and few were classified as patient reported outcome measures³. Many variables influence the collection of outcome measured in practice including clinical reasoning, access to resources and organisational priorities.

Aim

The aim of this study was to gather information from specialist clinicians pertaining to collection of outcomes and methods used in their clinical practice.

Study Design

A cross-sectional study using survey design.

Ethics

Royal Brisbane and Women’s Hospital HREC:
HREC/18/QRBW/303; University of Queensland HREC:
2018002467; Griffith University HREC: 2019/017

Participants

Allied health professionals who were clinical specialists working with people with hand burn injuries from the Australian and New Zealand Burn Association (ANZBA) and the Australian Hand Therapy Association (AHTA).

Data collection

A purpose designed survey was developed for this study which was distributed via Survey Monkey®.

Results

Participants n= 43. Respondents perceived that hand dexterity (83.7%) was the most important outcome to their patients. Frequently reported assessment methods used by clinicians were patient report of hand function (n=42, 97.7%) and observation (n=41, 95.3%). Time points, assessments and barriers are outlined in tables 1-3 below.

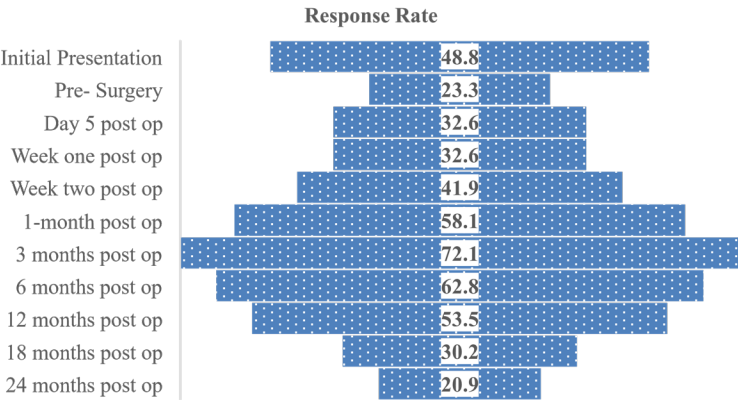


Table 1 Time point for collection of outcome measures

Assessments	Response Rate n (%)
Jamar Dynamometer	40 (93%)
Goniometer	39 (90.7%)
Pinch Gauge	36 (83.7%)

Table 2 Most cited assessment tools

Main Barriers	n (%)
Time Taken to Administer	37 (86%)
Lack of available resources	25 (58.1%)
Time Taken to Analyse the Results	22 (51.2%)
Therapists own Lack of Skill/ Confidence using these assessments	17 (39.5%)
Not Validated for the Burns Population	16 (37.2%)
Feasibility of Assessment	16 (37.2%)
Measurement of Impairment Level	9 (20.9%)
Reliability	6 (14%)
Patient Satisfaction with Scores Over Time	3 (7%)
Other	5 (11.5%)

Table 3 Factors which influence clinicians choice out outcome measure

Respondents reported that patient perception of recovery (n = 33, 76.7%), followed by patient motivation (n=28, 65.1%), support from family/significant other (n =17, 39.5%) and psychological recovery (n=15, 34.9%) were indicators used to measure psychosocial considerations when measuring outcomes post hand burn injuries.

Discussion

Respondents reported that hand dexterity, scar cosmesis, full active range of motion and hand strength were outcomes of importance to the patient. Measurement of hand dexterity and hand strength are included in assessment recommendations for hand function post burn injury². Strength and dexterity are important as they correlate with work performance and daily tasks⁴. Focus on regaining range of motion of the hand post burn injury is essential component of recovery⁴.

Conclusion

The findings of this study suggest that clinicians collect some outcome measures in their routine practice using both informal and formal assessments. Barriers identified when using outcome measures include a lack of time and a lack of reliable/ validated tools to measure outcomes post hand burns. There is a need for further studies in this area.

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