

第二十七篇：

Effects of an Occupation-Based Intervention on Hand and Upper Extremity Function, Daily Activities, and Quality of Life in People With Burn Injuries: A Randomized Controlled Trial

## 研究目的彙整

本研究的主要目的在於探討以職能為導向的介入方式（Occupation-based intervention，具體為CO-OP 方案）對於手部及上肢燒燙傷患者在各個層面的臨床效益。

具體而言，本研究旨在驗證該介入措施是否能有效改善以下指標：

- 手部與上肢功能（Hand and upper extremity function）。
- 日常生活活動能力（Ability to perform daily activities）。
- 生活品質（Quality of life）。

此外，研究者透過隨機對照試驗（RCT），將受試者分為「僅接受傳統復健」的對照組，以及「接受傳統復健結合 CO-OP 方案」的實驗組，藉此比較兩者在職業參與表現、滿意度、疼痛程度、關節活動度、抓握力及水腫等變項上的差異。

# 研究結果彙整

## 1. 整體療效（時間效應）

研究顯示，兩組（實驗組與對照組）在接受 18 次治療後，除了「水腫」以外，所有評估指標均有顯著進步。這包括職能表現、滿意度、手部功能、失能程度、疼痛感、關節活動度、抓握力、日常生活活動能力以及生活品質。

原文："The results showed that there were notable changes in all the study variables except edema in both groups."原文："...the time effect was significant for all outcome measures, with the exception of edema, indicating notable improvements in occupational performance and satisfaction... hand performance... disability... pain... range of motion, power grasp, ability to perform daily activities... and quality of life in both the control and intervention groups..."

## 2. 組間差異（介入效果比較）

統計分析發現，在大多數的評估指標中，實驗組（CO-OP 方案）與對照組（傳統復健）之間並無顯著的統計差異。這顯示以職能為導向的介入在改善手部功能與生活品質方面的效果與傳統治療相當。

原文："However, these changes ( $p \leq .05$ ) were not statistically significant between the two groups."原文："...the group effect was not significant for any outcome measure..."原文："The results of post hoc multiple comparisons indicated that there was no significant difference between the control and intervention groups regarding scores on the COPM-F and COPM-S, MHQ, Quick-DASH, VAS pain, range of motion, power grasp, edema, MBI, and WHOQOL-BREF..."

### 3. 特定指標的顯著進步：腕關節活動度

本研究唯一的顯著「時間 x 組別」交互作用出現在**腕關節的屈曲（Flexion）與伸展（Extension）**。在第 6 週與第 14 週（追蹤期）的評估中，實驗組的進步幅度顯著大於對照組。

原文："Moreover, a significant Time x Group interaction was found only for wrist flexion and extension."原文："However, greater wrist flexion and extension were found in the intervention group compared with the control group at the Wk 6 and 14 evaluations."

### 4. 職能目標達成速度（臨床觀察）

雖然統計數據在多數指標無顯著組間差異，但研究者觀察到實驗組（CO-OP）參與者達成職能目標與獲得滿意度的時間較對照組**更早**。對照組在治療過程中面臨較多挑戰，直到最後幾次療程才有所改善。

原文："In our study, the participants in the intervention group achieved improved occupational performance and satisfaction earlier than the control group..."原文："The control group participants... faced many challenges during the treatment period until the last sessions."

## 結論彙整

### 1. 以職能為導向介入的有效性

研究結論指出，對於燒燙傷患者而言，以職能為導向的介入措施（如 CO-OP 方案）與傳統治療方案在改善手部功能、日常生活活動能力及生活品質方面同樣有效。

原文："According to the results, the occupation-based interventions are as effective as traditional therapeutic interventions for the improvement of hand and upper extremity function, ability to perform daily activities, and quality of life in people with burn injuries."

## 2. 臨床應用價值

CO-OP 方案被認為是除了傳統復健之外的一種有效方法，且適合應用於復健臨床場域中，以協助燒燙傷患者恢復手部表現與生活品質。

原文："The CO-OP protocol, as an occupation-based intervention, can improve hand performance, ability to perform daily activities, and quality of life in people with burn injuries, and thus it can be useful in rehabilitation clinics." 原文："The principal finding is that the CO-OP protocol, in addition to traditional rehabilitation, can be an effective approach that is associated with improvements in occupational performance and satisfaction, hand performance, disability, pain, range of motion, power grasp, the ability to perform daily activities, and quality of life."

## 3. 技能習得的速度優勢

雖然統計指標上組間差異不大，但結論強調介入組（CO-OP）在職能表現與滿意度的提升上比對照組更早達成目標。

原文："In our study, the participants in the intervention group achieved improved occupational performance and satisfaction earlier than the control group, with the final sessions focusing only on using compensatory and adaptive methods."

## 4. 特定生理功能的改善

研究結論亦提及，相較於傳統治療，結合 CO-OP 的介入對於燒燙傷患者的腕關節活動度（屈曲與伸展）具有更顯著的改善潛力。

原文："However, greater wrist flexion and extension were found in the intervention group compared with the control group at the Wk 6 and 14 evaluations."

## 研究限制彙整

- **評估時間間隔過長**：研究缺乏短時間間隔的頻繁評估，這導致無法記錄到實驗組在介入初期可能產生的早期積極成效。

原文引用："A lack of evaluations at short intervals led to a failure to record early positive results in any of the outcomes in terms of the CO-OP treatment protocol in the intervention group after the interventions started."

- **樣本數較小與潛在偏誤**：受限於參與者返家後未能持續療程，以及新冠肺炎（COVID-19）疫情的影響，最終僅有 20 名參與者（每組 10 名）完成研究。較小的樣本規模可能導致結果出現偏誤。

原文引用："...because of problems caused by the coronavirus disease 2019 pandemic, there was a total of 20 participants (10 in each group). The small sample size in both groups can be considered the main reason for potential bias in the results."

- **初期介入措施的重疊**：為了符合倫理並滿足患者基本的生理需求，兩組在最初的六次療程中都接受了相同的傳統復健。這可能是導致兩組在最終臨床結果上沒有顯著統計差異的主要原因之一。

原文引用："In addition, considering that both groups received similar treatments for six sessions at first, which can be one of the main reasons for the lack of significant differences regarding the outcomes between the two study groups..."

## 學術意義與價值

- **填補研究空白**：本研究是全球首篇探討認知取向每日職能表現（CO-OP）方案應用於手部與上肢燒燙傷患者效果的隨機對照試驗。
- **實證職能導向介入的效力**：研究證實以職能為導向的介入方式在改善生理功能（如關節活動度、抓握力）與生活品質上，與傳統復健具有同等效力。
- **深化認知策略對生理復健的連結**：研究探討了如何透過元認知策略（Goal-Plan-Do-Check）促進技能習得與轉移，為燒燙傷復健提供了新的理論基礎。

原文引用："Our study is the first to focus on the effect of the CO-OP on people with burn injuries." "According to the results, the occupation-based interventions are as effective as traditional therapeutic interventions for the improvement of hand and upper extremity function, ability to perform daily activities, and quality of life in people with burn injuries."

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## 臨床應用、意義與價值

- **提升復健效率與滿意度**：臨床觀察顯示，接受 CO-OP 方案的患者能比傳統組更早達成個人設定的職能目標，並獲得較高的治療滿意度。
- **促進特定關節功能的長期改善**：結合 CO-OP 的介入能顯著提升患者在追蹤期的腕關節屈曲與伸展角度，優於僅接受傳統復健的效果。
- **臨床治療方案的多元化**：建議復健診所與醫院可將 CO-OP 納入燒燙傷治療程序，以協助患者解決日常生活中具體的職能障礙。

- **以病人為中心的轉向：**強調讓患者主動參與問題識別與策略開發，有助於其重新融入社會與生活角色。

原文引用："The CO-OP protocol... can improve hand performance, ability to perform daily activities, and quality of life in people with burn injuries, and thus it can be useful in rehabilitation clinics." "In our study, the participants in the intervention group achieved improved occupational performance and satisfaction earlier than the control group, with the final sessions focusing only on using compensatory and adaptive methods."