

Chronic Pain Syndrome in 1,284 soldiers wounded in combat: Insights from an ongoing conflict in Israel



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Introduction

- Chronic Pain Syndrome (CPS)—pain persisting greater than 3 months—is an under-recognized consequence of combat trauma that impairs functional recovery, compromises force readiness, and burdens healthcare systems. However, contemporary operational data on its development remains limited.

Aim

- Examine the incidence of CPS and its association with previous health status, sociodemographic factors, and the development of post-traumatic stress disorder (PTSD), amongst combat soldiers with orthopedic or neurological injuries during the ongoing conflict in Israel.

Methods

- A retrospective cohort study using data from the Tertiary Medicine Array of the IDF medical corps.
- The study included active-duty combat soldiers with documented combat-related neurological or orthopedic injuries (October 7th, 2023, to April 1st, 2025).
- Participants were followed until October 1st, 2025.
- CPS was defined by at least one of the following: a medical board–adjudicated medical fitness code consistent with CPS, a formal diagnosis of CPS, opioid analgesics dispensation, or referral to a pain clinic.
- Outcomes were assessed at ≥ 3 months following injury to determine pain chronicity.
- Logistic regression was used to identify factors associated with CPS development, including sex, socio-economic and health status, and service type.

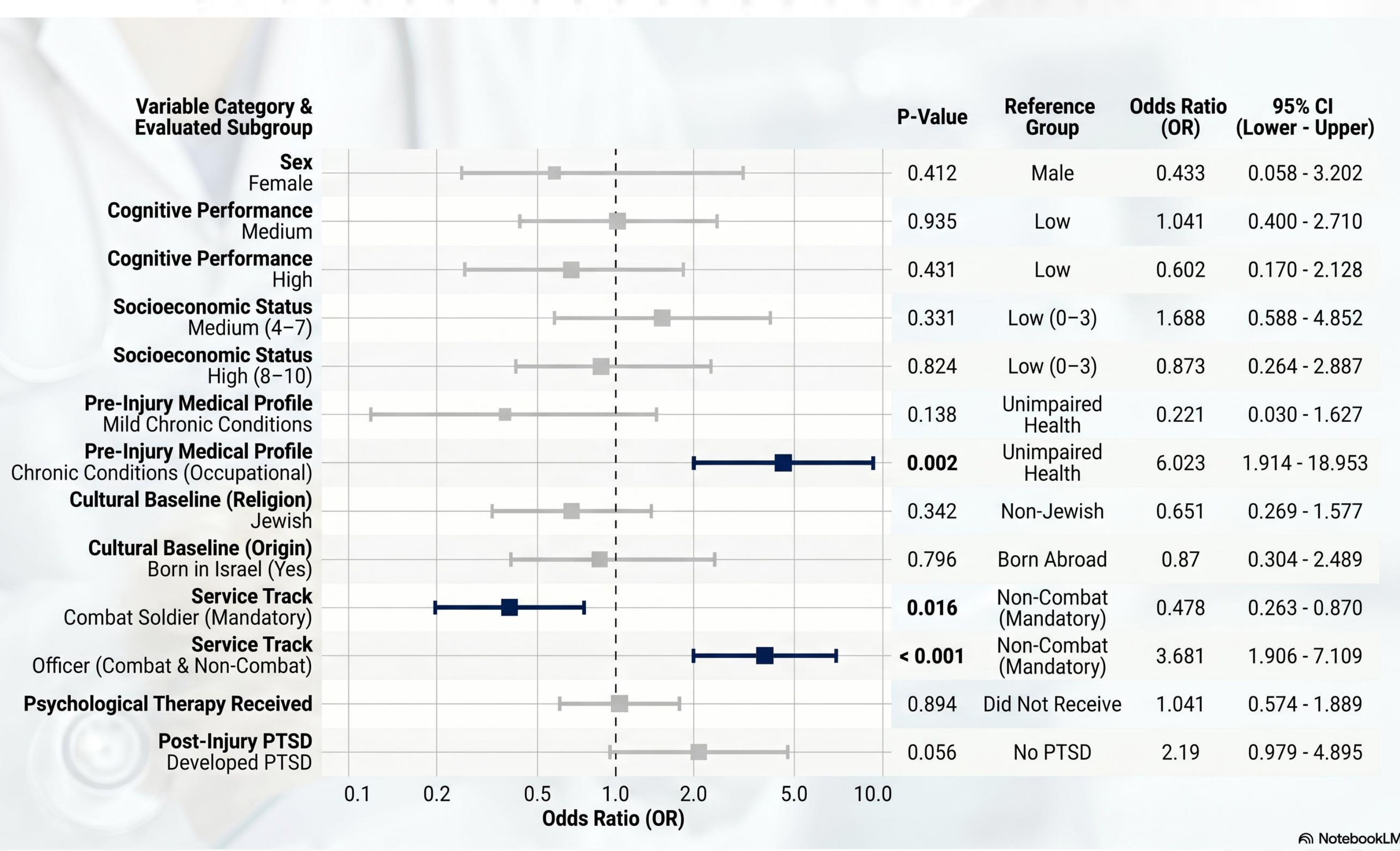
Results

- A total of 1,284 wounded soldiers were included in the study. Most participants were male (95%), were of impeccable health (88.5%) and were combat soldiers in mandatory service (67.9%). Only 10.4% were officers.
- CPS developed in 46 soldiers (3.6%).

Table 1: Baseline characteristics of the study cohort

Characteristic	Confirmed Pain (n=46)	Probable Pain (n=193)	No Pain (n=1,045)
Military & Occupational Factors			
<i>Cognitive Performance Score</i>			
Low	5 (10.9%)	23 (11.9%)	109 (10.4%)
Medium	36 (78.3%)	134 (69.4%)	754 (72.2%)
High	5 (10.9%)	36 (18.7%)	181 (17.3%)
<i>Pre-Injury Medical Profile Baseline</i>			
Unimpaired Health	41 (89.1%)	168 (87.0%)	926 (88.6%)
Mild Chronic Conditions	1 (2.2%)	19 (9.8%)	102 (9.8%)
Occupational Implications Condition	4 (8.7%)	6 (3.1%)	15 (1.4%)
<i>Service Track Assignment</i>			
Combat Soldier (Mandatory)	26 (56.5%)	137 (71.0%)	764 (73.1%)
Non-Combat Soldier (Mandatory)	6 (13.0%)	120 (62.2%)	170 (16.3%)
Officer (Combat & Non-Combat)	14 (30.4%)	17 (8.8%)	111 (10.6%)
Post-Injury Clinical Interventions			
<i>Psychological Therapy (Days 14–30)</i>			
Received	20 (43.5%)	78 (40.4%)	444 (42.5%)
Did Not Receive	26 (56.5%)	115 (59.6%)	601 (57.5%)

Figure 1: Risk Factors Associated with the Development of Confirmed Chronic Pain Following Combat Trauma



Conclusion

- CPS was relatively uncommon among combat-wounded soldiers who underwent extensive rehabilitation in the IDF medical corps Tertiary Medicine Array.
- Participants with prior chronic conditions with occupational implications and officers had an increased risk of CPS development.
- These findings highlight the importance of early risk stratification and structured follow-up after combat trauma to improve recognition and management of CPS

Disclaimer: This study was conducted by the listed researchers. Statements and opinions published in this abstract are solely those of the individual abstract authors and not the Israel Defense Forces (IDF). This study did not receive external funding or support. All authors had access to the data utilized in this study.

