• The purpose of this study was to describe injury characteristics in MARSOC personnel and compare injury patterns between Operators and combat support personnel.

• We hypothesized:
  - CSP will report similar injury proportions and mechanisms compared to OPs.
  - The majority of preventable injuries would be sustained during physical training.

INTRODUCTION

- Unintentional musculoskeletal injuries inflict a large burden on military forces.
- Special operations forces sustain higher rates of musculoskeletal injuries than conventional forces.
- Each Special Operations Command under the United States Special Operations Command umbrella has its own culture and way of operating—requiring similar injury characteristics to be identified before effective injury prevention and performance optimization strategies can be enacted.
- Special operations commands, such as Marine Corps Forces Special Operations Command (MARSOC), select personnel from the conventional Marine Corps to support their needs of Operators in theater, called Combat Support Personnel (CSP).
- These CSP may be exposed to higher level demands and thus may have more similar injury characteristics to Operators and require similar injury prevention interventions.

PURPOSE AND HYPOTHESES

- A total of 141 MARSOC personnel participated in this study.
  - 81 Operators (OP, Age: 29.7 ± 5.8 years; Height: 1.80 ± 0.06 m; Mass: 86.8 ± 8.72 kg)
  - 50 Combat Support Personnel (CSP, Age: 28.0 ± 6.3 years; Height: 1.79 ± 0.06 m; Mass: 83.5 ± 11.1 kg)

RESULTS

- The most common cause of preventable injuries were running (OP = 40.0% and CSP = 60.0%).
- The most common activity being performed when preventable injury occurred was physical training (OP = 66.7% and CSP = 80.0%).

SUMMARY AND CONCLUSIONS

- MARSOC Operators and combat support personnel sustain similar injuries with similar mechanisms.
- This data demonstrates the need to include combat support personnel in injury prevention initiatives within the special operations community.
- This data also stresses the importance of monitored training as the majority of preventable injuries were sustained during physical training (OP = 66.7% and CSP = 80.0%).
- The knee (OP = 20%, CSP = 10%), lower leg (OP = 26.6%, CSP = 10%), and spine (OP = 26.7%, CSP = 30%) are the most common locations for preventable injury.

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