



SPINAL PAIN PREVALENCE AND ASSOCIATED FACTORS IN MILITARY F16 FIGHTER PILOTS DURING OPERATION DESERT FALCON



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INTRODUCTION

Neck pain (NP) and low back pain (LBP) are a common musculoskeletal issue among operational military pilots¹. According to a survey from 2015, the year prevalence of NP and LBP among Belgian F16 pilots was 81% and 72 % respectively².

PURPOSE

The aim of this study was to determine the prevalence of NP and LBP in operational F16 pilots during the last 12 months. It is therefore a reassessment of the numbers of 2015. A second objective was to identify possible important factors related to NP and LBP.

METHODS

A questionnaire on NP and LBP was completed by 36 fighter pilots who participated in the mission Operation Desert Falcon (ODF) 2020-2021. In this questionnaire, there were specific questions on cause, timing, characteristics, prevention and therapy of



RESULTS



In total 61.1% of the F16 pilots reported neck pain and 50% reported low back pain during the last 12 months. For both NP and LBP the most of them (respectively 76.9% and 44.4%) reported pain after the flight. Even >24hours after the flight, 34.6% still suffered from NP and 14.8% from LBP.

The duration of the flight seemed to be the most triggering factor for both NP (78.3%) and LBP (88.2%).

Associated factors	Neck Pain	Low Back Pain
Time of flight	78.3%	88.2%
Type of flight	69.6%	
NVG (night vision goggles)	72.7%	
Sitting position		82.4%
Chair		64.7 %

88.9% of the pilots went to the physiotherapist during the ODF mission and 94.4% would like to have physio support at their home base and during every mission.

CONCLUSION

The high prevalence of spinal pain in the past 12 months confirmed the importance of the physio support abroad. The lower year prevalence of spinal pain in F16 pilots compared to 2015 might partially be explained by the gradual implementation of a multidisciplinary prevention program since 2017.

Besides the ergonomic factors, duration and type of flight, it will be crucial to continue to invest in prevention screenings and individual training programs.



REFERENCES

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