

High-intensity exercise following trauma amongst firefighters

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Introduction + Objectives

Firefighters face high levels trauma in their jobs, which can lead to post-traumatic stress disorder (PTSD) (Rosenbaum et al., 2015). There is an urgent need to develop interventions that are accessible and acceptable to firefighters in order to prevent PTSD, build resiliency and promote recovery. There is a growing body of evidence that suggests high-intensity exercise could help reduce the long-term symptoms associated with trauma (Rosenbaum et al., 2015).

The objectives of this study are to (1) Explore the capacity for implementing recommendations associated with high-intensity exercise among firefighters, and (2) Identify next steps for research and practice.

Methods

Two occupational therapy students conducted qualitative interviews with 8 firefighters. Recruitment was purposive and based on a snowball sampling approach. The consultations were guided by a semi-structured interview guide focused on understanding their perspectives of current practices following trauma, the feasibility of implementing a high-intensity exercise protocol, and key factors to consider in order to maximize adherence and compliance. The data collected from the consultations was analyzed using a descriptive, thematic approach (Braun & Clarke, 2006).

Results

Pseudonym	Role	Career Yrs	Gender
Joshua Campbell	Full time	20 yrs	Male
Giannis Karabassis	Full time, Volunteer	6 mos, 3 yrs	Male
David Smith	Full time	13 years	Male
Ravi Kapur	Full time	15 years	Male
Mindy Chu	Full time	5 years	Female
Doug Harris	Full time, WFI, PFT	8 years	Male
Amanda Mosinski	Full time	12 years	Female
Tariq Alawi	Full time, Acting Captain PFT	26 years	Male

Theme 1: Current practices are evolving and beneficial, but do not meet the needs of all firefighters.

"Departments are starting to realize it's a really big problem, I don't think they know how to handle it yet." - Mindy Chu "The crew or captain can encourage you to reach out for help. As long as you're doing your job, no one is going to force you to reach out for help." - David Smith



The fire departments have resources available such as peer support, Critical Incident Stress Teams, and Employee Assistant Programs. However, it is usually up to the individual to reach out and access the services. Therefore, some people do not receive the supports and services they need following a traumatic incident, putting them at risk for PTSD.

Theme 2: Stigma towards mental health conditions is a dying culture, but still apparent in firefighters.

"I run into burning buildings but I feel sad today." - Joshua Campbell "With the younger generation, people are more willing to talk about - not so much that 'suck it up, buttercup mentality,' but it's still there for sure." - Mindy Chu

While some participants stated that stigma towards accessing supports has drastically decreased amongst firefighters, most stated that it still exists. As current practices are not meeting the needs of all firefighters, many individuals "fall between the cracks." Often, individuals do not reach out for the fear of appearing weak.

Theme 3: Most firefighters are receptive to implementing exercise programs.

"The younger guys are more receptive to exercise." - Doug Harris
Each stakeholder has confirmed that their firehall
does have an exercise facility, but it is typically
quite small and has older and/or broken equipment.
Firefighters often bring in their own
equipment or do body weight exercises. Some
stakeholders reported enjoying group exercise with
their team. Some participants noted that older
firefighters exercise less often and with less intensity.

Theme 4: Implementing a high-intensity exercise program will be challenging for firefighters.

"Everything in your mind and body is heading in the other direction from high intensity." - Joshua Carter

"If you could prove that it would really benefit your heart and your brain, that might change people's views" - Amanda Mosinski

Participants highlighted that the timing of the exercise program would have to fit their schedule. When returning from a traumatic call, the main priority is to prepare the truck for another call and to rest. To get buy-in from firefighters to follow an exercise program immediately following a traumatic call, they would need evidence about the benefits of the high-intensity exercise program and it would need to be specific and relatively short. Suggestions for implementation included recommending cycling, being mindful of injuries, and keeping the program short in order for the team to be ready for another call.

Discussion & Conclusions

There is a need to expand trauma prevention interventions amongst firefighters. Evidence suggests that high-intensity exercise programs could help reduce the long-term symptoms associated with trauma (Rosenbaum et al., 2015). The results of this research indicate that firefighters are receptive to the implementation of exercise programs. However, to date, the literature provides little insight into the feasibility of implementing recommendations for high-intensity exercise following a critical incident among first responders. In a future study combining these results with results of a literature review conducted by physiotherapy colleagues at the School of Rehabilitation Science at McMaster University, an accessible, proactive high-intensity exercise program can be developed and investigated to reduce the impact of trauma on first responders.

References

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