**[GEOFFRION] -** Psychological first aid to prevent post-traumatic stress injuries among recently exposed emergency medical technicians: can it work?

**Authors:** Steve Geoffrion, Université de Montréal, Trauma Studies Centre Marine Tessier, Université de Montréal, Trauma Studies Centre Stéphane Guay, Université de Montréal, Trauma Studies Centre Luc de Montigny, Urgences-Santé Josée Coulombe, Urgences-Santé

**Priority Research Area:** Prevention, including measures, programs and interventions aimed at limiting the number of new PTSI cases among PSP

Relevant PSP Population(s): All, but especially emergency medical technicians (EMTs)

For more information, please contact: Steve Geoffrion, 514-343-6111 #5511, s.geoffrion@umontreal.ca

What is the issue? Effective post-immediate interventions aimed at preventing PTSI among EMTs (and other public safety personnel) are still lacking in Canada and around the world. Many health organizations and international experts on PTSI now recommend offering Psychological First Aid (PFA), an evidence-informed early intervention approach, to prevent PTSIs. The main aim of PFA is to promote various aspects of well-being among workers exposed to potentially traumatic events, namely: safety, calmness, self- and community efficacy, connectedness, and hope. Regardless, the scientific relevance and effectiveness of PFA as a promising workplace solution has yet to be established. Furthermore, scientists still do not know how to implement such programs within high-risk organizations.

What was the aim of the study? In May 2018, Urgences-Santé (i.e., EMT corporation for the Montreal area) implemented PFA as a peer-support intervention for EMTs exposed to potentially traumatic events while at work. Urgences-Santé handles more than a third of all emergency calls in Quebec and is one of Canada's largest emergency medical services. In collaboration with Urgences-Santé, this project sought to evaluate the feasibility of PFA as a post-traumatic peer-support intervention among EMT. Feasibility studies are used to determine whether an intervention should be recommended for efficacy testing when research on the matter is still in its infancy. With Urgences-Santé stakeholders, three specific research objectives were elaborated to answer the question: "Can PFA work for EMTs?":

- 1. To assess the implementation of PFA at Urgences-Santé.
- 2. To evaluate the acceptability of PFA for EMTs.
- 3. To test the limited efficacy (i.e., efficacy testing with significant constraints) of PFA at preventing post-traumatic reactions among Urgences-Santé EMTs.

How was the study conducted? Interviews and documentation mining were used to examine the implementation processes in the workplace (obj. 1). Interviews were conducted to assess levels of acceptability for this intervention (obj. 2). Validated questionnaires were collected over time to offer preliminary evidence for the intervention's effecacy. Data collection began in July 2019. Data collection for objectives 1 and 2 is complete. Methodological and organizational barriers have slowed data collection on the efficacy of PFA for PTSI prevention. We are now trying to adapt the research design to evaluate the potential efficacy of PFA when compared to the usual forms of support offered by the organization.

## What did the study find?

#### 1. IMPLEMENTATION

- PFA has been well implemented and is suitable for EMTs with no mental health training.
- Clinical supervision is required to maintain skills and monitor the intervention.
- Psychological support for peer helpers is crucial for program sustainability.

#### 2. ACCEPTABILITY

- PFA offered by peer helpers is accepted by all levels of the organization.
- PFA has been well internalized by peer helpers who can intervene with ease and flexibility.
- Organizational support (e.g., support from managers, time off to offer PFA, room available for meetings with users) promotes acceptability.
- PFA fits well with the emergency rapid response culture of EMTs and their work (e.g., may be offered in the ambulance after the event)

## 3. IMPACTS (positive and negative)

- PFA de-stigmatizes the psychological support needs of EMTs.
- PFA improves psycho-social intervention with citizens.
- PFA increases the mental workload of peer helpers.
- There is a need for greater recognition of peer helpers to prevent work overload.

## 4. SUGGESTIONS FOR IMPROVEMENT

- Increase the number of peer helpers to share the workload.
- Reserve parts of the regular work schedule for PFA work.
- Broaden the intervention offer PFA to EMTs who are on sick leave and to those returning to work.

What are the implications of this study? PFA can is an appropriate intervention for EMTs. However, peer helpers must receive regular clinical supervision and continuing education to ensure program fidelity and prevent burnout. Organizational accommodations are critical to the successful implementation and acceptability of this program. Specifically, PFA peer helpers must be relieved from their regular duties to support their colleagues and for them to feel valued. Regarding PTSI research, a randomized-control trial evaluating this early intervention poses considerable methodological, ethical and organizational challenges.

#### What are the key messages?

- PFA fits nicely with PSP culture;
- PFA can be delivered by workers with no training in mental health;

- The clinical supervision of their PFA peer helpers is crucial for program success;
- By offering trauma-informed peer support, PFA fosters social support which is an strong protective factor in the prevention of PTSI;
- PFA offered by peer helpers meets the work-specific support needs of PSPs;
- In all, PFA offered by peer helpers can work for EMTs and PSPs, but its efficacy at preventing PTSIs remain uncertain.

# Provide a list of potential target audiences for this research: Paramedic Chiefs of Canada

- Paramedic Association of Canada
- International Association of Fire Fighters
- Canadian Association of Fire Chiefs
- Provincial Paramedical colleges (some examples, not exhaustive)
- O Alberta College of Paramedics
- o Ontario Paramedic Association