Representation about physical activity among firefighters: A study in Wallonia

Gilles Dubru, Antoine Gribomont, Marc Cloes

Introduction
- To be a firefighter is a dangerous job
- That implies anxiety, stress, depression, sleep disorders, absenteeism and other deviant behaviors (Fullerton, Ursano & Wang, 2004; Carey, Al-Zaiti, Dean, Sessanna & Finnell, 2011)
- To adopt an active lifestyle can reduce these health risks and thus maximizing the chances of staying healthy (OMS, 1999)
- 53% of Belgian firefighters have a BMI ≥ 25 and 15% of them have a BMI ≥ 30. Which is more than the Belgian average (Mensura, 2012)

Objectives
- Analyse the firefighters’ representations and lifestyle
- Identify the firefighters PA’s level
- Assess their satisfaction with their profession

Methods
- Online questionnaire (SurveyMonkey)
- Age, gender, BMI, rank, status, PA representation and practices, ...
- Contact one of the main firefighters association (FRCSPB) to reach a significant number of subjects

- Progress :
  - Contact with regional fire departments
  - Validation by 3 firefighters and a researcher (ULiège)

Data collection
- Development of the questionnaire
  - Excel and Statistica
  - Student t tests
  - 1-factor ANOVA
  - Correlation matrix
  - 443 responses including 394 valid
  - Representative with a 95% confidence level and 5% confidence interval
  - From 20 February to 31 March

Data analysis

Results and discussion
- Results showed that firefighters :
  - Have a positive representation of PA
  - Are aware of the benefits of a regular practice on their health
  - Are aware of the importance of good stress management and cardiovascular endurance qualities in this profession
  - Deplore a lack of maintenance of these qualities

- Level of firefighters’ PA :
  - A highly significant difference (p= .000) between private and professional PA
  - 18% of the subjects felt that they had a low physical activity

- Firefighters were generally satisfied with their job and considered that they have an acceptable quality of life

- The mean BMI of the subjects was above 26, indicating a slight overweight. Sedentary lifestyle, poor infrastructure, injuries due to lack of fitness allow us to suspect an insufficient training

- Other factors were pointed out by the subjects (stress, absenteeism, deviant behavior…) 

Conclusion
Being firefighter is a perilous and physically and mentally demanding job. However the study shows existing problems such as high BMI, physical inactivity, poor infrastructure, injuries due to lack of fitness, etc. The study also highlights other problems inherent in the profession such as stress, cardiovascular events, absenteeism, deviant behavior, etc. The firefighters were generally satisfied with their job and considered that they have an acceptable quality of life. However lack of time, financial and human resources must not be a barrier to the practice of essential PA for those people who are directly related with danger. In the case of firefighters, the place given to PA in the workplace seems to not be significant and such situation should alert public authorities.

Implications
- Medical tests and standardized physical assessments should be proposed more regularly throughout the career.
- Regional fire departments could enter into agreements with the municipalities or the Directorate-General for Sport to use the existing infrastructures.

References