

Factors associated with the evolution of fatigue one year after the lockdown period

Maëlle CHARONITIS^{1,2}, Florence REQUIER^{1,2}, Camille GUILLEMIN^{1,2}, Mathilde REYT^{1,2},
Adrien FOLVILLE^{1,2}, Marie GEURTEN², Christine BASTIN^{1,2}, Sylvie WILLEMS², Vincenzo
MUTO¹, Christina SCHMIDT^{1,2}, Fabienne COLLETTE^{1,2}

¹GIGA-CRC In Vivo Imaging, University of Liège, Liège, Belgium
²Psychology and Cognitive Neuroscience Research Unit, University of Liège, Liège, Belgium

Introduction

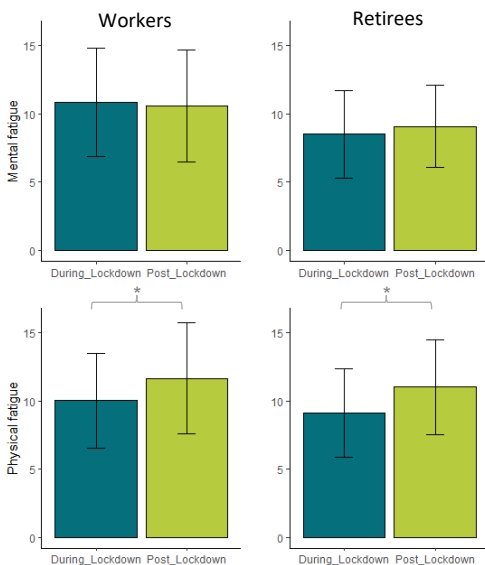
The COVID-19 lockdown has induced an increased state of **fatigue** in the population¹. However, how fatigue has evolved since the end of the lockdown still needs to be determined. Here, we investigated the evolution of mental and physical fatigue and their associations with daily life characteristics and psychological aspects in a cohort of workers and retirees, separately.

Methodology

133 **workers** (Age: 43.33 ± 11.20 , 104 ♀) and 40 **retirees** (Age: 68.20 ± 5.64 , 25 ♀) completed a questionnaire addressing fatigue level, affective state, sleep quality, daily activities, mental load and investment at work (for workers) in April-May 2020 and 2021, considering their condition during lockdown and one-year post-lockdown.

Variables with significant changes (*t-test*, $p < .05$) over the one-year period were entered into generalized linear mixed models (GLMM), with **mental** or **physical fatigue** set as dependent variables.

Results



*Plots are used for visual display only and not as a substitute for the full GLMM statistics.

By comparison with the lockdown period, we observed that physical (but not mental) fatigue further increased in the two groups (*Workers*, $W=2050.50$, $p < .001$; *Retirees*, $W=157.00$, $p < .05$). Anxiety level was also higher post lockdown vs. during lockdown in all participants (*Workers*, $t=-3.972$, $p < .001$; *Retirees*, $W=157.00$, $p < .05$) and remained positively associated with mental ($F(1,124)=15.86$, $p < .0001$), and physical fatigue ($F(1,124)=13.85$, $p < .0001$) in workers, but not in retirees. Workers reported a higher workload ($W=1165.00$, $p < .001$), which was negatively linked with both types of fatigue (*Mental fatigue*, $F(1,119)=3.98$, $p < .05$; *Physical fatigue*, $F(1,119)=5.75$, $p < .05$). No other significant association between the variables and fatigue was found.

Conclusion

Living through a pandemic seems to trigger a series of upheavals in the population resulting in **increased mental and physical fatigue**. We previously showed that the lockdown increased fatigue level². However, data here seem to indicate that increased fatigue is a result of the health situation and not the lockdown *per se*. Moreover, associations between fatigue and daily life characteristics during the pandemic do not seem similar between workers and retirees.

¹T. Field et al., *Am J Psychiatr Res and Rev.* 27, (2021) ²F. Requier et al., in prep., (2022)