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Alarming increased rate of smoking and associated lifestyle behaviours in patients with chronic cardiac diseases during COVID-19 pandemic related lockdown

F. Chagüé1,∗, M. Boulin2, J. Eicher1, F. Bichat1, M. Saint-Jalmes1, A. Cran sac2, B. Trojak3, A. Soudry4, N. Danchin5, Y. Cottin1, M. Zeller6

Corresponding author.

1 Service de Cardiologie
2 Pharmacie
3 Service de Psychiatrie
4 DRCI, CHU, Dijon
5 Service de Cardiologie, Hôpital Européen Georges Pompidou, Paris
6 Laboratoire PEC2, Université de Bourgogne Franche-Comté, Dijon, France

∗ Corresponding author.
E-mail address: frederic.chague@gmail.com (F. Chagüé)

Background COVID-19 outbreak on tobacco consumption. During the 6th week of lockdown (which had started on March, 17th), 150 randomly selected CHF patients (from the Dijon HF-Clinic) and 250 CCS patients from the RICO survey were invited to answer an anonymous questionnaire. The 20-min lasting phone interview was conducted by 8 trained research assistants. The questionnaire, which was validated through internal and external control procedures, addressed medical, lifestyle topics and psychological distress through Kessler 6 score (K6) ≥ 5.

Table 1. Characteristics (Mean ± SD, or n(%)).

| Variables | Total | Male | Female |
|-----------|-------|------|--------|
| Current smokers (CCS + CHF) | 43/325 (13.2) | 33/219 (15.1) | 10/106 (9.4) |
| CCS | 35/201 (17.4) | 26/144 (18.1) | 9/57 (15.8) |
| CHF | 8/124 (6.5) | 7/75 (9.3) | 1/49 (2.0) |
| Age, y | 56.3 ± 12.2 | 56.1 ± 11.9 | 58.7 ± 13.6 |
| Psychological distress (K6 ≥ 5) | 12 (27.9) | 10 (30.3) | 2 (20.0) |
| Smoking increase (% among smokers) | 13 (30.2) | 10 (30.3) | 3 (30.0) |
| Alcohol consumption increase | 4 (9.3) | 4 (12.1) | 0 (0) |
| Physical activity decrease | 20 (46.5) | 15 (45.5) | 5 (50.0) |
| Screen time increase | 16 (37.2) | 13 (39.4) | 3 (30.0) |
| Weight increase > 2 kg | 11 (25.6) | 10 (30.3) | 1 (10) |

CCS: chronic coronary syndrome; CHF: congestive heart failure.

Results Among the 400 patients, 325 were responders (81.2%), including 201 CCS and 124 CHF. Among the current smokers (n = 43), 13 (30.3%) declared increased tobacco consumption, including one woman who started smoking during the lockdown and one man who relapsed after quitting. The main reported explanations for increased smoking was stress (7) and inactivity (5); none declared the influence of media messages on a potential protective effect of nicotine as a cause of increase. Main results are summarized in Table 1.

Conclusion During COVID-19 lockdown, a significant rate of cardiac patients has increased their tobacco consumption, which is often associated with psychological distress and other deleterious lifestyle behaviours, in particular in men. These alarming findings may have major implications for disease destabilization and event recurrence in such high-risk patients at both short and long term. This may help to define preventive strategies to target after lockdown relief in chronic cardiac populations.

Disclosure of interest The authors declare that they have no competing interest.

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