

# COVID-19 pandemic containment: following the example of military submariners

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Since its initial description at the end of December 2019, the new severe acute respiratory syndrome (SARS)-CoV2 epidemic has become a rapidly evolving pandemic.<sup>1</sup> Following the WHO recommendation, governments worldwide declared quarantine status and containments to prevent the spreading of the disease. At the time of writing, more than 3.5 billion people (half of humanity) are under containment because of coronavirus restrictions<sup>2</sup> in either their movement, or limitations in the availability of everyday items. The 20th century saw massive international treaties favouring both circulation of goods (eg, North American Free Trade Agreement, Association of South East Asian Nations and Economic Community Of West African States) and people (Schengen Area). The number of international air travellers has multiplied by 10 in less than 50 years. In this context, containment imposed by the SARS-CoV-2 pandemic is triggering psychological distress.<sup>3</sup> We believe that military submariners are a potential population for which

to study quarantine and containment measures against. They sleep under the ocean usually between 2 and 3 months at a time, which is currently much longer than the usual containment period undertaken by most countries. Looking at evidence-based data regarding submariners, the specific containment of submariners provides conflicting results for stress. Even if a first study showed higher stress levels in the Royal Navy submariners than in the Royal Navy surface fleet,<sup>4</sup> a 2-year cohort study did not confirm those results.<sup>5</sup> Moreover, despite not seeing the natural sunlight that synchronises the circadian rhythm, there was no alteration of the sleep and wake patterns during a 70-day routine mission, with sleep monitored by polysomnography.<sup>6</sup> Furthermore, and maybe the most important, the Royal Naval submariners between 1960 and 1989 seemed to have been a healthy group with low mortality overall.<sup>7</sup>

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**Contributors** This correspondence was written during a Skype session between the three authors. J-BB-M was the main writer and the corresponding author.

**Funding** The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

**Competing interests** None declared.

**Patient consent for publication** Not required.

**Provenance and peer review** Not commissioned; internally peer reviewed.



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**To cite** Bouillon-Minois J-B, Trousselard M, Dutheil F. *BMJ Mil Health* 2020;**166**:362.

Received 16 April 2020

Revised 21 April 2020

Accepted 22 April 2020

Published Online First 4 May 2020

*BMJ Mil Health* 2020;**166**:362.

doi:10.1136/bmj.military-2020-001501

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