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LETTERS

The university as a safe environment during the SARS-COV-2 pandemic: the experience of Bari Politecnico

L'università come ambiente sicuro al tempo della pandemia da SARS-COV-2: l'esperienza del Politecnico di Bari

Dear Editor,

the SARS-CoV-2 pandemic started in December 2019 and still remains a major global health issue. Every country in the world has adopted drastic measures to contain the virus, although their stringency varies among countries, ranging from increased surveillance and focused interventions to strict lockdown (1). Italy was the second country where the disease had a major impact early in the pandemic, such that a strict nationwide lockdown was declared from March 9 to May 3, 2020. Nonetheless, between January and May 2020, there were 210,000 COVID-19 cases in Italy and 29,000 deaths were recorded (2).

Due to the lockdown, universities (and in general all educational services) shifted to online classes, with students attending lessons and taking their exams from home. On-site activities were reduced to those considered indispensable. Research activities also had to be modified, such as by the adoption of a smart-working model (3).

Between May and August 2020, the number of SARS-CoV-2 infections in Italy decreased. In response, the lockdown was loosened and some activities were restarted, albeit with specific safety protocols (social distancing, use of masks, temperature checks at the workplace entry, environmental disinfection, mixed models of smart and in-office work). These actions were accompanied by periodic serological and PCR screening tests (4).

"Bari Politecnico", located in Apulia, Italy, was founded in 1990. The university currently has 10,000 students and a staff that includes 275 professors and 252 administrative employers. In September 2020, Bari Politecnico adopted a specific protocol aimed at maintaining on-site research and administrative activities but also a mixed model for teaching activities (alternating classroom and e-learning) (5).

Two months later, in November 2020, Bari Politecnico, in collaboration with the University General Hospital ("Bari Policlinico"), conducted a seroprevalence screening among all university staff. Thus, 373 professors, researchers and employers voluntarily underwent a chemiluminescence immunoassay for IgM and IgG anti-SARS-CoV-2 in serum, performed as recommended by the Centers for Disease Control and Prevention (6). Only 3 individuals in the tested population (0.8%; 95%CI=0.2–2.3%) had IgG antibodies while another three (0.8%; 95%CI=0.2–2.3%) had IgM antibodies. The detection of IgM antibodies was immediately followed by molecular examination for the diagnosis of SARS-CoV-2, performed as recommended by the World Health Organization (7), but no cases of current infection were detected. These findings are comparable to those reported in May 2020, based on the experience at Sant'Anna University, located in Pisa (8).

Screening activities were carried out during the onset of a second peak of the epidemic that in Apulia began in September 2020, at which time circulation of SARS-CoV-2 was moderate (prevalence on October 31, 2020: 2.85/1,000 inhabitants) (8). In addition to the major social impact of the measures implemented to contain the pandemic (9), our data demonstrate the safety of university-level research activities, as long as they are adequately managed.

Our experience has important implications for public health policy, given the potentially detrimental effects for the current generation of students of terminating on-site research and learning activities as a pandemic control measure. Similar to school closures, shutting down on-site university research can be expected to adversely impact on both human capital and the welfare of the affected students and young researchers (e.g. PhD students). Students from disadvantaged socioeconomic backgrounds may suffer the most, as they may lose unique academic opportunities. Compensating for the loss of educational services and of the associated human capital becomes increasingly difficult the longer the crisis lasts (10). Closures can also affect the continuity of research activities, including those that may aid in the fight against the pandemic, as well as others that are crucial during a social and economic crisis.

As the world awaits universal mass vaccination, the experience at Bari Politecnico can be considered a best practice in achieving a balance between workers' safety and maintaining the continuity of learning and research activities in academic institutions.

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