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- The extent at which legislation has helped or failed the situation.

Conclusion: Inadequate legislation compromised the health of teachers OH services was provided by unskilled personnel.

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Effects of face masks on physical performance, physiological response and subjective respiratory effort during a submaximal bicycle ergometer test

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Introduction: Evidence on undesirable side effects of face masks worn during the COVID-19 pandemic is controversial.

Materials and Methods: The present study, explores whether wearing a medical face mask (MedMask) affects physical working capacity (PWC) at the heart rate of 130 and 150 beats per minute in comparison to no mask, a filtering face piece mask with exhalation valve class 2 (FFP2exhal), and a cotton fibric mask (community mask). Secondary, physiological and subjective responses were analyzed such as a potential moderating role of subjects' individual physical fitness level and gender on face mask effects. A submaximal bicycle ergometer protocol was applied in an intra-individual cross-over design using either no mask, a MedMask, FFP2exhal, or a community mask on four days in randomized order. PWC130 and PWC150 were measured as well as transcutaneous carbon dioxide partial pressure, oxygen saturation, breathing rate, blood pressure, perceived respiratory effort and perceived physical exhaustion.

Results: Using the MedMask did not lead to a reduction in PWC and a systematic or relevant change in physiological response, neither was this the case when the FFP2exhal or community mask were worn. Perceived respiratory effort was up to one point higher on a zero to ten scale when using face masks ($p < 0.05$) compared to the no mask condition. No differences occurred in general perceived exertion.

Conclusion: These results provide reason to believe that physical performance and physiological responses when wearing face masks are similar to not wearing a face mask, although some more respiratory effort is required.

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A model proposal to ensure the health maintenance in a Colombian University during the Pandemic Covid-19

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Introduction: The Covid -19 Pandemic had caused a worldwide crisis leading to many negative consequences on healthy habits, biomechanical system, and mental health to students and workers. The National University is the main University in Colombia; it has

around 30.000 students and 10.000 workers. Due to the Pandemic, many workers had to work from home, which generated consequences that had to be interrupted.

Material and Methods: Through the application of many virtual surveys, we could choose the main topics to be included in this strategy. Finally we selected the next ones and worked on them from our office:

- biomechanical, due to the new physical ergonomics conditions.
- psychosocial, related to many factors as epidemic Pandemic behavior, new family issues at home, addictions, etc.
- nutrition facts, because of inadequate eating habits.
- cardiovascular, due to the aspects listed above, and sedentary lifestyle.
- occupational health facts, remembering the importance of preventing work-related injuries.

Results and Conclusions: Many employees and students at our university had been highly motivated to go back on having healthy habits, which, in some cases have had a positive impact on their families; who have been sharing the same home space with the workers during the Pandemic. According to the intervention developed by our Occupational Health Office, in alliance with the University's Faculty of Medicine, we are improving our workers lifestyle, which will have positive impacts on them and their families. It represents such an important aspect that will ameliorate our community public health results.

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Conception of ergonomic interventions and challenges during Covid-19 pandemic

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Introduction: The Covid-19 pandemic shifted ergonomists' focus from work optimization to health-related interventions. For over a year, safety measures were primarily linked to limitation of infection with the new coronavirus. The paper aims to propose a framework for conception and evaluation of ergonomic interventions and to present major challenges faced in implementation of the framework during the pandemic.

Material and Methods: The proposed framework comprises comprehensive methodology for assessment of physical environment parameters and ergonomic risks, and proposal of solutions. Methods used are RNUR, software solution based on REBA and OWAS and proposed methodology for physical environment assessment based on ISO standards and Romanian standards for determination of noise, dust, lighting and microclimate. Analysis of key challenges faced during implementation and potential causes are also presented in a dedicated section.

Results: The framework was applied for development of ergonomic interventions in two companies. The most prominent risks identified were noise, uncomfortable postures, standing, manual load handling (lifting, pushing, dragging, carrying), torso twisting/bending.

Conclusions: The Covid-19 pandemic negatively impacted the success of implementing participatory ergonomics principles, imposing the need to re-adjust strategy and find creative solutions