## We should be considering age, comorbidities and health-care system performance to relax Covid-19 related social distancing measures

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Dear Editor,

Aiming to avoid a health system collapses due to the COVID-19 pandemic; social distancing measures are taken broadly.<sup>1</sup> The very high or high-risk population is of specific concern, once expected to have an increase rate of admission.<sup>2</sup> Besides criticised, the strategy seems to be working properly and now brings the discussion about when the measures will be relaxed with safety.

Comparisons with other pandemics are not entirely appropriate, but it seems reasonable to look back at the past and consider valuable lessons learned. The direct association between death and age as well as for comorbidities or clinical risk is observed in other viral infections similarly to the current outbreak.<sup>3-13</sup> Age is also a known as an independent survival factor. On the other hand, it should be highlighted that young children are the exception once have an immature immune system, main reasons why we generally see a "J-like" curve shape as schematically represented by the Figure 1. Although, age-mortality rate seems to be similar amongst world regions, the poor healthcare and quality index is associate with increase death rate.<sup>14</sup>

Unfortunately, we were relying on certainties that are fragile for the moment. There is no solid evidence about herd immunity in patients with asymptomatic disease. Moreover, we all expect that the patients that recovered from the infection are hopefully immune or at least have a mild disease in case of re-infection but the knowledge about the immune response and anti-bodies nature is currently imature<sup>15, 16</sup>. There is also scare evidence about mass use disposable barrier methods, such as face masks or gloves, will diminish the viral transmission.<sup>17</sup> Although community use of personal protection equipment might give a sensation of safety in some cultures, the misuse or re-use could be dangerous and there is no evidence assuring the benefit provided by community manufactured masks.<sup>18,19</sup>

Therefore, once the evidence is being gathered and a vaccine, probably the most reliable scientific based way out of this crisis, will take at least some months to be available, we should consider relax social distancing measures based on age adjusted by comorbidities as a first step whilst continuing with hand washing associated with high standards of self-hygiene when possible.

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## Competing Interests

The authors declare that they have no competing interests

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