

studies. Due to the average age of our population (more than 30% older than 65 years) and the high number of Social Health Centers in our small area (11), the Hospital Management together with our geriatrician, attached to the Internal Medicine Department, performed a work plan that consisted of close monitoring of the same through a daily telephone interview with the medical and nursing staff of said centers and scheduled and on-demand visits through the Home Hospitalization Unit. In addition, the social health centers were reinforced with nursing personnel and one of them also with medical personnel, with the intention of handling all positive COVID-19 cases without having to move them whenever their clinical situation allowed it. In mid-March, the first COVID-19 positive patient was admitted to our hospital and since April 15 we have not had positive cases that required admission, which has a much lower impact than in other Regional hospitals in our environment (being the entire Galician Community area of low incidence of the disease). This model of crisis management during the pandemic highlights the great importance of “anticipating events”, working “in a network” between primary and hospital health care and the value of well-used telemedicine that allowed avoiding multiple hospital admissions from the centers social and healthcare, in addition to, through the TELEA monitoring program (Home Assistance Platform), carry out daily follow-up of patients from their homes, which is why we want to communicate this through this letter since we are convinced that teamwork and power anticipate the arrival of the virus, they have been very important to be one of the healthiest areas with the lowest lethality in Spain.

COVID-19 is here to stay. Although the fundamental pillars to prevent its expansion are hand washing and social distance, as long as there is no vaccine, community immunity or effective therapy,<sup>4</sup> perhaps in 1 or 2 months we will suffer another new outbreak of the disease, for which we will all be very more prepared without a doubt.

## A novel approach to combat COVID-19 – A risk stratification model with FAIR intervention



### Nuevo enfoque para combatir la COVID-19: modelo de estratificación del riesgo utilizando la base de datos FAIR

Dear Editor,

It is observed that COVID climbs the disease ladder more lethally causing more severe illness with pronounced mortality when aided by the rungs of comorbidity, obesity and age.

A meta-analysis of 1527 patients revealed, the most prevalent comorbidities in COVID-19 were hypertension (17.1%) and cardio-cerebrovascular disease (16.4%) and diabetes mellitus (9.7%). Patients with DM or hypertension had a 2-fold risk, with cardio-cerebrovascular disease had a 3-fold risk of severe disease.<sup>1</sup> Age is an independent risk factor with reports conclusively indicating that age >65 years are at high risk and poor outcome with high mortality. Report from center for disease control (CDC) USA states that the percentage

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<https://doi.org/10.1016/j.jhqr.2020.11.001>  
2603-6479/

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of COVID-19 patients with at least one comorbidity or risk factor was higher among those requiring ICU admission (78%) and those requiring hospitalization without ICU admission (71%) than among those who were not hospitalized (27%).<sup>2</sup>

Data from New York on COVID deaths reveal grave figures of 70.1% mortality in those above 75 years and comorbidities. Obesity alone and in association with other metabolic conditions is now a proven factor for higher mortality with COVID with odds ratio (OR) value approaching 3.68 in those with BMI > 25.<sup>3</sup>

The virus is ubiquitous in its tendency to infect but it discriminates in the way it selectively targets the susceptible group to a telling effect. A crude but compelling analogy is, we are wielding a butchers' knife instead of a scalpel against this menace. Some of the countermeasures initiated have been draconian causing severe disruption to the general population with collateral damage and burden on the health care systems. There are areas for huge improvement and for directing our future interventions to a more focused end. The strategy hinges on focusing on the ‘Comorbidity and Risk Stratified’ (CRS) group.

Accurate health database on comorbidities and age in the community can be compiled and collated to analyze

the extent to which each of these comorbidities individually and in combinations can impact the outcome with COVID-19. Relative risk (RR) for susceptibility for each individual factor and their effect in combination, will go a long way in devising specific strategies within CRS group.

A **Risk score** can be formulated and standardized based on analysis of impact of these parameters individually and in combination on the CRS group. This risk score could be vital in triaging the symptomatic & asymptomatic COVIDS cases. Prediction models so derived can focus on a more specific surveillance and intervention of CRS group.

**CRS mapping** within the community and support of this susceptible group will to a large extent simplify the struggle the world at large is facing due to compulsive needs and stringent measures of universal quarantine. It is logistically easier to undertake a surveillance of stratified groups than a general population at large.

In today's technology enabled world, mapping will be an extremely feasible option and technological advances can create early warning systems, greater data sharing across countries and more focused approach targeting vulnerable groups.

These pandemic spurts are likely to trigger as waves of epidemic clusters. A strategy to work against COVID at this juncture should be broad based and have four arms termed as the **FAIR** approach, an acronym for: **Fast, Adaptable, Innovative & Regional**.

This calls for a regular epidemiological, microbiological and clinical surveillance in the CRS group, followed by **Fast** response if the alerts criterion is met. A **Fast** and coordinated response between nations with data sharing is critical for a good outcome.

The success of the strategy hinges on **Adaptability** and flexibility. A template of best standard operative procedures should be reviewed periodically and accordingly strategy revised and reviewed for effectiveness.

Any model to blunt the lethality of this disease will demand a fair degree of **Innovation** on all fronts like in preventive care, diagnosis, therapeutics, infrastructure and strategies.

A strategy should be **Region** specific based on demographics, economic status and health infrastructure is likely to be a more effective model than a uniform one.

In such dark desperate times shrouded with unpredictability, it is only fair to give **FAIR** a fair chance.

## Contributors

Both the authors have contributed equally to the conceptualization and execution of the article.

## Declaration of interests

We declare no competing interests nor conflict of interest.

## Acknowledgements

We acknowledge Dr Ramesh V Bhat, Dr Anand R and Asvin R for their valuable input and contributions to the study.

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<https://doi.org/10.1016/j.jhqr.2020.10.005>  
2603-6479/

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