

# FENStatS COVID-19 Working Group: Goals, Initiatives and Perspectives

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The FENStatS Covid19 WR is a free spontaneous association of statistical experts from 14 European countries, united by concerns related to the current pan-info-demic and statistical challenges revealed by the Covid-19 havoc. The present short paper tracks when, how and why the WG has formed, illustrates our mission, aims and scope, describes the steps taken so far and outlines perspectives for future work.

## 1 Introduction

The Italian Statistical Society (SIS) is a member of the Federation of European National Statistical Societies (FENStatS) since its foundation in 2011. Under the umbrella of the FENStatS, the Covid-19 working group (Covid19 WG) was born and I have been appointed to while serving my 4-years mandate in the board of the SIS. The FENStatS Covid19 WR is a free spontaneous association of around 30 statistical experts (at the moment of the writing of this short paper) from scientific statistical associations and institutions, from 14 European countries (Figure 1).

## 2 When, How and Why

At the onset of the pandemic emergency, late winter 2020, several Covid-19 related initiatives were launched within the statistical European community, both with scientific and disseminating purposes. The SIS, for instance, promptly responded with its own dedicated webpage, where a large amount of material was gathered during the long Italian lockdown. In the same period, SIS was also coordinating an intense community discussion through its email-Forum and online meetings. Differently, the FENStatS Covid19 WG has formally formed later, in June 2020. That was the time when, in Europe, we started figuring a possible 'back to normality'. Yet, we were already becoming more and more aware that exactly that sort of 'normality' was, in fact, under discussion.

We have heard it over and over, indeed: this is not only a crisis, it is an opportunity. We have all wondered whether we will be able to subdue the crisis



**Figure 1:** 14 EU countries represented in the FENStatS Covid19 Working Group.

and make us better citizens of a better world. Surely it has been a planetary storm of numbers, models, epi-curves and predictions. A pan-info-demic. And it has shown us with unprecedented clarity how important high-quality data and statistics are for the preparation, implementation, assessment and adaptation of difficult political decisions. Particularly for the statistical community at large, it has been a true call for action, to do our part and contribute as statisticians. Looking at how data and quantitative information were collected, communicated and spread for use as decision-drivers, discomfort has been growing parallel to the worry about the threat to our health and daily life as we knew it. We, at the FENStatS Covid19 WG, are united by the concern to counter the current lack of statistical competence in society as revealed by this coronavirus havoc.

The FENStatS Covid19 WG pursues the mission to raise public awareness of the current and potential need for standardized, reliable statistics to support news media and the planning, implementation and evaluation of political decisions, during the Covid-19 global calamity and beyond. The WG sees itself as a supplement and support for activities at the national level and among its members. The WG does not conduct independent research. Rather, it is committed to connect initiatives and expertise, to provide information for general use, to prioritize the international comparability of statistics, to promote standards guidelines and data sharing. These are the crucial goals we are most concerned with. We are interested to work on topics that relate to all aspects of the pandemic. In

a first phase the focus has necessary been on the health angle. Successively we shall focus on social, educational, economic and ecological consequences of the pandemic global experience. In a forward looking perspective and inspired by the United Nation 2030 agenda of Sustainable Developing Goals (SDGs) the FENStatS Covid19 WG will aim at building statistical capacity while leaving no one behind.

### 3 Steps along the Path

In a first step, the WG has engaged in collecting material about basic data and indicators - e.g. mortality, health, diseases, health care, tests, etc. - to create an overview of how data is currently recorded in different countries, how data is evaluated and indicators are released. This activity has supplied an abundance of information, both within and beyond the European countries represented in the WG. As a result, starting on fall 2020 and based on such information, the implementation of the FENStatS Covid19 WG own Wikipedia project has initiated. It will be soon accessible at.<sup>1</sup>

During the summer 2020, the WG has been actively involved in supporting a Swiss project for a data literacy campaign.<sup>2</sup> The project was actually rooted in an initiative dating back more than three years ago, and yet made compelling by the current crisis. As a matter of fact, the Covid-19 has exposed how all sections of the population, as well as many disciplines, are lagging behind in our individual and collective data literacy. Particularly in the age of digitization, data literacy and statistical reasoning appear as key competences, that are indispensable if we as citizens are to be able to play an informed and responsible role in all areas of life, along the path toward an accomplished democracy. The joint draft of the 'Appeal for an urgent national data literacy campaign' has been released late July 2020 and it is accessible at.<sup>3</sup> It invites all interested organisations and associations, but especially the general public, to support this appeal. Each signature or support will help to anchor and implement the vital topic of promoting social data literacy in the political agenda in a lasting manner. Data literacy, and the apparent lack of, is a main concern for the FENStatS Covid19 WG, not limited to this particular initiative and certainly in need of further attention and action, as it will be discussed more in the concluding part of this short paper.

It makes conceivable part of the mission of the FENStatS Covid19 WG to respond and contribute to public requests related to its own priorities. As a third step, in late August 2020, the WG committed to two open requests for expert consultation. One of those was launched by the US National Academies of Sciences, Engineering, and Medicine as a 'rapid expert consultation' seeking inputs and advice to compose a guidelines book for decision makers to understand the extent and spread of Covid-19 based on an improved use of data.<sup>4</sup> Building upon the fact that decision making related to the pandemic often requires the use of

|   | Representativeness | Bias | Uncertainty,<br>Measurement &<br>Sampling Error | Time | Space |
|---|--------------------|------|---|------|-------|
| Number of confirmed cases                 | ⚠                  | ⚠    | ✓   | ⚠    | ⚠     |
| Hospitalizations                          | ⚠                  | ⚠    | ✓   | ⚠    | ⚠     |
| Emergency department visits               | ⚠                  | ⚠    | ✓   | ⚠    | ⚠     |
| Reported deaths                           | ⚠                  | ⚠    | ⚠   | ⚠    | ⚠     |
| Fraction of viral tests that are positive | ⚠                  | ⚠    | ⚠   | ⚠    | ⚠     |
| Excess deaths                             | ✓                  | ⚠    | ✓   | ✓    | ✓     |
| Prevalence surveys (representative)       | ✓                  | ✓    | ✓   | ⚠    | ✓     |

✓ Data source usually meets this criterion.  
 ⚠ Data source may or may not meet the criterion, and questions related to that criterion should be asked.

**Figure 2:** 7 Covid-19 types of data (rows) and 5 assessment criteria (columns).<sup>4</sup>

data not designed for the specific task at hand, e.g. collected in an emergency, the guide aims at enabling leaders to gain insight into the strengths and weaknesses of available Covid-19 data, to understand the data type best-suited to the question at hand and to inform decisions most effectively. The guide focuses on 7 types of data, available both in US and EU, to support decision making and on 5 criteria against which the reliability and validity of these data types can be assessed. Key implications for decisors are discussed and ready-to-implement tools, such as for instance Figure 2, are provided.

Among the conclusions of the guide, it is remarked how continued investment in public health and its data surveillance structures is needed to meet the nation's current and future public health challenges.

The second open public consultation to which the FENStatS Covid19 WG contributed late summer 2020, was launched by the United Nation Statistical Division to make a commitment to support and implement the 'Global community's response to Covid-19'. The initiative has then been announced during the closing session of the 2020 virtual UN World Data Forum,<sup>5</sup> on the occasion of the third World Statistics Day the 20th of October. A draft version of the consultation is accessible at.<sup>6</sup>

In the last few months the focus of the FENStatS Covid19 WG appears to have shifted toward more practical interests and outputs. A shared desire has emerged within the WG to work on a project to be implemented and actually applied in the near future for the benefit of the general public. The challenge constituted by the lack of social data literacy has arose, during meetings and discussions, as the most urgent. At this end, the FENStatS Covid19 WG and the pre-existent FENStatS Statistical Literacy Group are joining efforts to develop a framework

for data literacy campaigns to promote and disseminate across EU. The starting point from which to build upon, will be the Data Literacy Charta, which has been just launched in Germany<sup>7</sup> and is already receiving an unexpectedly wide media response. More specifically, two groups are currently working jointly on the idea of creating a web-based course on the topic of 'Data-informed decision making in a pandemic'. The digital course is to be hosted on a professional educational platform and the necessary contacts and actions are being taken.

I would like to conclude by reminding that, as mentioned in the introduction, the FENStatS Covid19 WG is a free spontaneous group of statisticians. Anyone with an interest to engage and contribute to the mission, aims and scope of the group as illustrated in this short paper, is much welcome to join. All it is needed is to email me or directly the WG's coordinator [katharina.schueller@stat-up.com](mailto:katharina.schueller@stat-up.com).

## References

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