MANAGING **INFLUENZA** DURING THE **COVID-19** PANDEMIC

CORONAVIRUS, FLU AND RSV COLLIDING IN THE FALL

CONCLUSIONS AND RECOMMENDATIONS

As the world deals with the unrelenting daily spread of the novel coronavirus COVID-19, ESWI wants to look further down the road. It's possible that the expected second wave of COVID-19 could coincide with the next influenza season. This could be a double challenge for healthcare systems worldwide, and potentially lead to a greater crisis than the one the world is currently facing.

Given this scenario, certain questions need to be faced:

- Are countries ready for how the coronavirus may impact the next flu season?
- How can we safeguard flu vaccination and thereby minimize the impact of flu on the other respiratory diseases we confront?
- How can antivirals be used in the upcoming flu epidemic?

ESWI organised four webinars in June 2020 to address these questions and discuss them amongst peers, clinicians and policymakers.

INFLUENZA AND RSV IN A COVID-19 WORLD

CLINICAL MANIFESTATIONS OF COVID-19, INFLUENZA AND RSV

INTERVENTION STRATEGIES FOR COVID-19, INFLUENZA AND RSV

CORNERSTONES OF PANDEMIC PREPAREDNESS AND URGENT ACTIONS

The following is a summary of the main conclusions and recommendations from each of the four webinars.

Organized by
European Scientific Working group on Influenza

www.eswiwebinar.org

INFLUENZA AND RSV IN A COVID-19 WORLD

CONCLUSIONS

It is very difficult to predict what's going to happen in the coming months. It's generally accepted that a second wave of COVID-19 is extremely likely, as is the recurrence of seasonal flu. But no-one can predict whether the combination of both viruses is going to be less or more severe than the appearance of just one of them.

Influenza and COVID-19 together **may be less severe** due to the COVID-19 mitigation measures, including the TTTQ (Test, Track & Trace, and Quarantine) measures implemented in many countries, which may lessen the influence of influenza too. Moreover, the appearance of one virus may limit the appearance of the other, due to the phenomenon of viral interference.

On the other hand, the effects of influenza and COVID-19 together **may be more severe** due to the appearance of both of them at the same time.

RECOMMENDATIONS

1. **Be prepared for the reappearance of both flu and COVID-19** in the fall of 2020.
2. **Increase flu vaccination coverage**. This is particularly crucial for the high risk groups and for healthcare workers. Minimum coverage for these groups is generally accepted to be 70%, a level that has not yet been reached in most countries of the world.
3. Be prepared to **stock and use the flu antivirals** available.
4. **Continue extensive surveillance and testing** for flu, other respiratory viruses such as RSV, and COVID-19.

CLINICAL MANIFESTATIONS OF COVID-19, INFLUENZA AND RSV

CONCLUSIONS

There is a large overlap in the clinical symptoms of COVID-19, influenza and RSV. Good laboratory diagnosis is therefore essential, especially as the three infections may coincide, influencing their respective severities in a positive or negative way. Thankfully, more than 80% of all people infected with COVID-19 have relatively mild symptoms.

Loss of taste or smell, and severe lung pathology, are seen in both flu and COVID-19 infections, although abnormal coagulation in the lungs tends to be a typical symptom of COVID-19, especially among severely infected or ventilated patients.

Generally there is a large overlap in the risk groups for influenza and COVID-19. Interestingly though, children and pregnant women, who are greatly at risk for influenza, seem to be at much less risk for COVID-19. Insufficient data is available for RSV in this respect.

As regards therapeutic interventions, treatment of the symptoms is essential at different levels, such as in the front line, nursing homes, hospitals, and ICUs. No specific antivirals have yet been developed. There have been quite high expectations for certain repurposed drugs but the results are unclear. Also, most potential COVID-19 antivirals have not been tested in very early stage patients. Many studies are being carried out amongst Biological Response Modifiers with varying degrees of potential. Dexamethasone might be the most promising with a 30% reduction in clinical symptoms.

RECOMMENDATIONS

1. **Implement and comply with non-pharmaceutical interventions** such as lockdowns, social distancing, and face masks.
2. **Very early intervention** is key. Earlier implementation of lockdowns could have resulted in significantly fewer casualties.
3. **Test, Track & Trace,** and **Quarantine** (TTTQ) all infected patients and their contacts.
4. **Use smart apps** wherever possible to identify people who might be infected.
5. **Ensure first line treatment** of patients by GPs.
6. **Prepare hospitals and ICUs** using the latest data.
7. Promote more extensive **flu vaccination** and **flu antiviral storage**.

INTERVENTION STRATEGIES FOR COVID-19, INFLUENZA AND RSV

CONCLUSIONS

It's clear that public health and social measures can stop ongoing individual chains of transmission and prevent new outbreaks of COVID-19. A combined strategy of early lockdown with Test, Track & Trace, and Quarantine (TTTQ) measures is important to limit the next wave of outbreaks. Surveillance and testing capacity for COVID-19, flu and RSV is crucial, along with the detection of the viruses and, in the case of COVID-19, the antibodies.

Therapeutic strategies currently being investigated have yielded their first encouraging successes, but more studies are needed. Various repurposed antivirals and other anti-infectives such as anti-HIV, remdesivir and hydroxychloroquine show mixed potential. Biological Response Modifiers such as dexamethasone and others are being studied, as are polyclonal and monoclonal antibodies.

RECOMMENDATIONS

In the absence of a COVID-19 vaccine, and with limited therapeutic options, it becomes even more essential to:

1. **Thoroughly prepare flu vaccination campaigns** for the coming season.
2. **Increase the stocks and usage of influenza antivirals**.

CORNERSTONES OF PANDEMIC PREPAREDNESS AND URGENT ACTIONS

CONCLUSIONS

In "peace time", significant investments are needed in:

- Non-pharmaceutical interventions (NPIs), protocols and necessary materials.
- Preparedness in primary care, nursing homes, hospitals and ICUs.
- The scaling up of reliable diagnostic and surveillance capabilities.
- Protocols for rapid clinical, virological and pathogenesis studies to help understand the virus and the disease.
- Broadly protective vaccine platforms.
- Broadly active antiviral platforms.

RECOMMENDATIONS

1. **Prepare for a new COVID-19 wave**.
2. **Introduce and comply with non-pharmaceutical interventions** (e.g. physical distancing, face masks, teleworking, school closures) as early as possible. The countries who introduced lockdown measures the earliest were the most effective.
3. **Introduce infection prevention and control measures** such as thorough Test, Track & Trace, and Quarantine (TTTQ).
4. **Establish more uniform NPI measures** based on scientific evidence with the goal of achieving consistency and homogeneous measures across the 28 EU countries and between continents.
5. **Continue with vaccine development initiatives**. Currently more than 200 COVID-19 initiatives are ongoing worldwide; 17 in humans.
6. **Be realistic** about promises of the potential of vaccine programmes against COVID-19.
7. **Prepare for seasonal flu** by developing a vaccination programme targeting a broad population to limit the possible negative effect of two viruses appearing at the same time.
8. **Develop antiviral options** for treatment and prevention of influenza and COVID-19. Combinations of antivirals can increase potency and decrease the risk of resistance emerging in influenza and possibly also in COVID-19.

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