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In the midst of the perfect storm: Swift public health actions needed in order to increase societal safety during the COVID-19 pandemic

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ARTICLE INFO

Keywords:
COVID 19
Societal safety
Public health
Socially vulnerable groups
Sero-prevalence

ABSTRACT

The phenomenal speed of COVID-19 has subjected the public health professionals worldwide to struggle to subdue the spread of the disease and its impact of the affected societies. The limited biomedical and epidemiological understanding of COVID-19 along with the lack of vaccines and therapeutics have led to the reception of draconian measures from the societal safety domain, limiting human interaction through social distancing. Grounded on the adopted approaches, interventions in sero-prevalence studies, mobilisation of the primary health care (PHC) sector, as well as target socially vulnerable groups should be taken into consideration by health authorities.

Discussion

As the COVID-19 pandemic unfolds with astounding speed, public health professionals all over the world, are struggling to contain the spread of this novel disease and to mitigate its detrimental impact on the affected societies; societal safety is affected in so many different ways. Yet, public health response is currently based on thin evidence. Biomedical and epidemiological understanding of COVID-19 remains limited, while basic tools such as approved therapeutics or vaccines are still missing (Herper, 2020). As a result, in the societal safety domain proposed measures are draconian and are aimed towards suppressing the pandemic wave by limiting human interaction, through social distancing (Barmparis and Tsironis, 2020).

Based on the approaches adopted so far, we propose health authorities to consider the following interventions:

1. Sero-prevalence studies

Currently, most countries use PCR-based testing for cases that fulfil the criteria of a case definition adopted by the national public health authority. Echoing the clear plea of WHO for more testing, many countries strive to substantially increase their testing capacities towards mass testing. Mass testing undoubtedly favours timely isolation of infected patients and flattening of the epidemic curve, though its feasibility, particularly for weaker health systems, is questionable (WHO, 2020). In addition to the above, as the number of countries affected by the pandemic rises dramatically, the demand for tests will probably surpass the supply in the very near future (Kuznia et al., 2020).

Thus, sero-prevalence studies, using novel tools like the IgM-IgG rapid tests may prove to be extremely useful. New IgM-IgG rapid tests are currently being developed for the clinical setting, their specificity and sensitivity properties being improved (Li et al., 2020).

Their usage in randomized population samples might reveal valuable insights into the stage and magnitude of the COVID-19 epidemic in the respective country and the level of immunity encountered in the community, providing an estimation of the size of a-(oligo)symptomatic and already recovered patients. Such estimates may help health authorities take appropriate measures - tailored to the magnitude and stage of the epidemic at the subnational level - to focus on hot-spots and to avoid either overreaction or underestimation in their response (Anderson et al., 2020). Sero-prevalence studies may also shed light into the age-specificity patterns of COVID-19, which will in turn facilitate the appraisal of the effectiveness of measures such as school closure in reducing transmission (Cruz and Zeichner, 2020).

2. Mobilisation of the primary health care (PHC) sector

ARTICLE IN PRESS

Available online 12 May 2020
0925-7535/ © 2020 Published by Elsevier Ltd.

https://doi.org/10.1016/j.ssci.2020.104810

Received 6 May 2020; Accepted 6 May 2020
In most countries drastic social distancing measures are applied in order to slow down the speed of transmission of COVID-19 in the community and thus gain valuable time to upgrade capacities of the secondary and tertiary health care levels. Thus, while the focus of response planning falls on hospitals and ICUs, as they clearly need to be prepared for an unprecedented number of critically ill patients being admitted in the upcoming weeks, it should be stressed that responsiveness of the PHC will be key in order to keep the direct and indirect impact of COVID-19 pandemic on the health of the general population as low as possible. The PHC sector may not only function as an effective breakwater for hospitals, keeping mild cases at home, but can also contribute to epidemiological surveillance and health information dissemination. Taking into consideration the socio-economic impact of the COVID-19 crisis, mistrust and sense of injustice over access to health services is becoming a common pattern in most of the countries affected. Therefore, the reinforcement of social cohesion needs to pass by the promotion and the realization of Fundamental Principles and Rights at Work with a specific focus on public health measures (ILO, 2020a, 2020b).

In analogy to the sentinel system encountered in influenza surveillance, appropriately equipped GP offices or PHC centres can provide extremely valuable information on disease activity in the community. In times of lockdown-like conditions and overburden of healthcare establishment, telemedicine and provision of home-based care is key in order to prevent infection of vulnerable groups, like elders or multimorbid patients and to ensure a minimum level of continuity of care (ECDPC, 2020).

3. Target socially vulnerable groups

While utmost emphasis should be put during the ongoing crisis management on the protection of the elderly and multimorbid, socially vulnerable groups should not be neglected. CoVid 19 has a direct impact on three important areas in the EU: governance, economy and migration (Bozorgmehr, 2020). Inmates, refugees and migrants residing in camps, homeless, minorities and socially marginalized population groups are in dire need of tailored public health interventions and swift health policy action. From a safety perspective, migrants – in particular - have always been a special category under investigation (García-Arroyo and Segovia, 2020; Döös et al., 1994; Guldenmund et al., 2013). A sense of not being part of the national security system (Hayland, 2018), limited knowledge of national OSH policies and provisions, negligence on the part of employees and insufficient knowledge of their rights are reported in literature as limiting factors; from a pandemic perspective this can have a detrimental effect on their communities, hence particular attention should be paid.

Immediate measures that lift existing barriers to health access and address the unfavourable social determinants of health are required, in order to reduce the impact of COVID-19 on these vulnerable groups and to prevent establishment of segregated foci with prolonged active transmission.

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