Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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COVID-19: The forgotten priorities of the pandemic

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ABSTRACT

The zoonotic virus now named SARS-CoV-2 first infected humans in China, and COVID-19 has rapidly become pandemic. To mitigate its impact on societies, health systems and economies, countries have adopted non-pharmacological preventive practices such as 'spatial' or 'social' distancing, the use of protective masks, and handwashing; these have been widely implemented. However, measures aimed at protecting physical health and healthcare systems have side-effects that might have a big impact on individuals' wellbeing. As the pandemic reaches low- and middle-income countries, weaker health systems, limited resources and the lower socio-economic status of their populations make halting the pandemic more challenging. In this article, we explore the impact of COVID-19 and its prevention measures on the wellbeing of vulnerable populations. Special attention must be given to homeless, indigenous, migrant and imprisoned populations, as well as people living with disabilities and the elderly. More than just resolute governmental action will be required to overcome the pandemic. Links between science and political actions have to be strengthened. Fighting COVID-19 is a collective endeavour and community action, on a global scale, is of paramount importance.

1. Introduction

By the end of March 2020, more than three-quarters of a million people had been diagnosed with COVID-19 and more than 39 000 had died [1], even though the disease was declared a pandemic by the World Health Organization (WHO) only earlierthat month. The pandemic has swiftly reached and affected all continents and countries around the globe. Measures taken to reduce the rapid spread of the SARS-CoV-2 virus [2] have extended the impact of the pandemic on health systems, economies and society everywhere in the world.

No treatment for COVID-19 exists and a vaccine will not be available in less than 18 months (in an optimistic scenario). Nonpharmacological practices such as covering the mouth and nose when coughing/sneezing, frequent handwashing and maintaining spatial separation between persons can only retard the spread of the virus, and mitigate the burden of the disease. The strategies of "social distancing" include closure of educational institutions and workplaces, cancellation of mass gatherings, isolation of suspected or confirmed cases, quarantine of persons in contact with confirmed cases, stay-at-home recommendations, and even mandatory quarantine in some cities and residential areas [3]. These and further measures have been implemented especially to protect populations at higher risk: the elderly and people with comorbidities such as cancer, hypertension, diabetes and cardiovascular disease.

Governmental interventions have aimed above all else, as they should, at the protection of physical health. However, social distancing seeds the spread of misinformation and can have profound consequences for psychological wellbeing in vulnerable populations [4] (see Fig. 1).

2. Social distancing and isolation measures

Social distancing can diminish the wellbeing of not just those thought to be members of at-risk populations: it can reduce the wellbeing of anyone experiencing confinement, even in small degrees, and all humankind in general, given the dire situation posed by this pandemic. Some experts have recommended changing the term "social distancing" to "spatial distancing", because of "social distancing" can be misleading [5]. "Spatial distancing" more correctly connotes maintaining the physical distance from others that the use of "social distancing" intends to promote. But proper adherence to spatial distancing or isolation can have the side-effect of a social distancing that can have unfortunate consequences for psychological wellbeing.

A study conducted during the epidemic in January among over 17 000 users of Weibo – one of the most popular social networks in China - found differences in the expression of emotions among its users from

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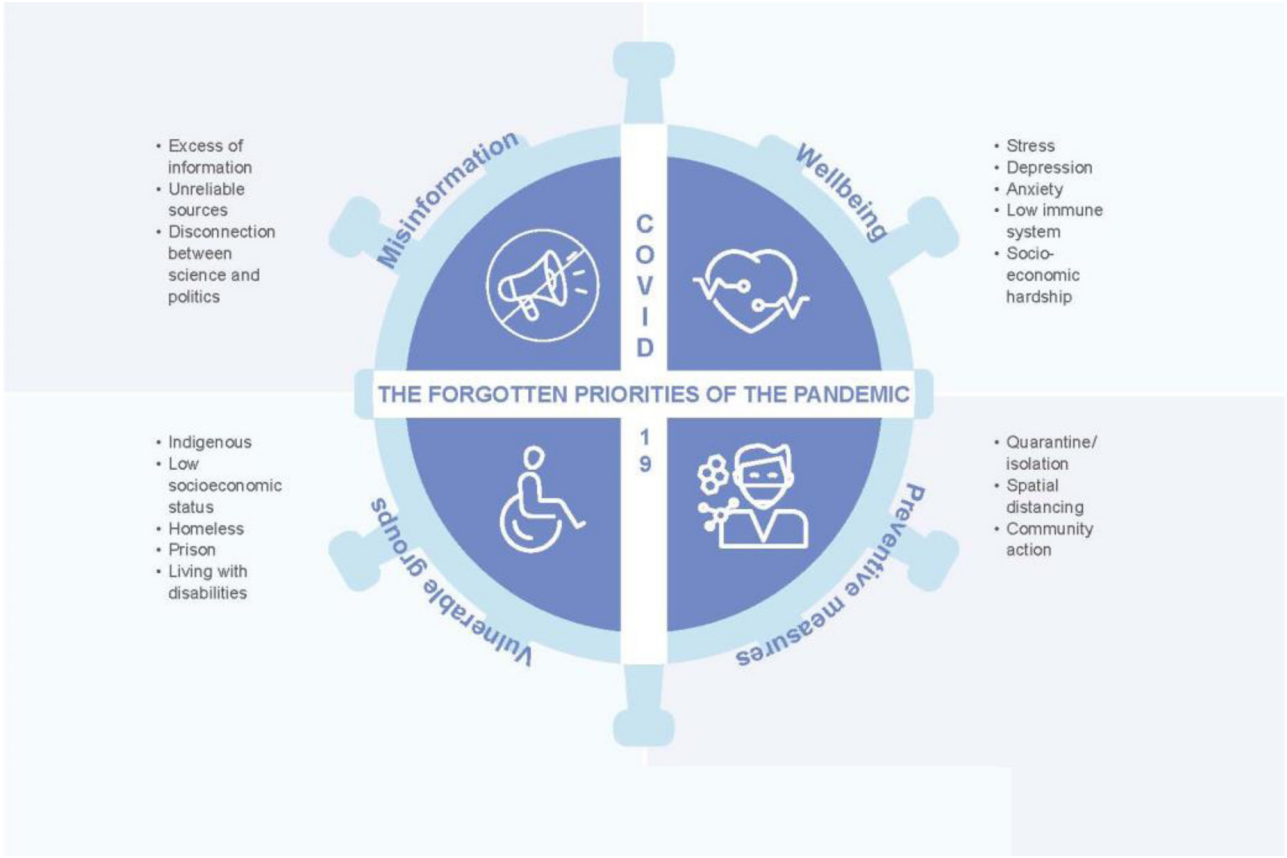

Fig. 1. Forgotten priorities of the pandemic.

which inferences about users' psychological states may be drawn. In a two-week period of social distancing, the number of posts talking about depression, anxiety, and indignation increased, while the expression of positive emotions decreased significantly [6].

Social interaction can still take place using the internet, mobile phones and other technological devices. In challenging times, the value of social capital, rather than being neglected, should be highlighted.

3. Misinformation

Misinformation not only inheres in the inaccuracy of information, it can emerge from the torrent of information coming from non-experts and commercially-driven interests. Misinformation may lead to uncertainty that is increased by the novelty of the virus to which we are being exposed. This state of uncertainty, often in combination with mobility restrictions and isolation, increases the risk of feelings of insecurity, anxiety, and a general emotional tension, all of which may impair our quality of life. Fear arising from the excess or unreliability of information about disease can lead to erratic behaviour, trigger the onset of psychiatric disorders, and even increase rates of suicide [7]. The daily flood of often contradictory information has led to panic buying of supplies that are unnecessary under conditions of spatial (or social) distancing, and to the misinterpretation of health care recommendations.

Misinformation, on the other hand, can also create a false sense of reassurance. Statements underestimating the severity of the disease (e.g., *'it is just a flu'*) and downplaying the risk that young populations run (e.g. *'it only kills old people'*), could have contributed greatly to the spread of the disease and its rapid progression.

Flawed communication is not confined to the media. Researchers, academia, and policymakers are disconnected from each other; both recommendations and measures already adopted are not being coordinated. Producing scientific evidence takes time, but preventive measures often have to be taken before science can yield all the answers. Moreover, research findings are written using technical insider terminology and usually published in English. This impairs policy-making everywhere, but especially in non-English-speaking countries.

The situation in low- and middle-income countries (LMIC) could be even worse. Some countries in Latin America have younger populations than those in Europe and some Asian countries, which is an advantage in terms of biological resistance against the coronavirus. But most of these countries have weaker health systems and socioeconomic conditions that can exacerbate consequences of the pandemic and increase social and health inequalities. Indigenous populations, homeless people, populations of lower socioeconomic status, migrants, and people in prison or detention bear high burdens caused by of high-risk environmental exposures, the inaccessibility of both accurate information and timely healthcare services, and myriad demographic and psychosocial conditions that impose poor health upon them.

4. Vulnerable populations

The largest proportions of indigenous populations live in LMIC. They are frequently marginalised, do not live in big urban centres, and have limited access to health care services. Beliefs about wellbeing and health can also influence how they seek medical attention. This poses challenges for health systems based on or oriented towards typical European and North American norms and values. Language barriers can intervene between the healthcare providers and indigenous people, whose lifestyles, foods, physical activities, and hygienic practices also vary. The immune profile of indigenous populations can also differ from those of the majority populations living in the same region. Response to a new virus and disease may therefore be unexpected and even deadlier among such minority groups.

A high proportion of homeless persons have chronic physical and mental disorders. These persons can be even more overlooked once healthcare services are allocated almost exclusively to fighting the COVID-19 pandemic. Detection of cases and prevention of disease in a transient population are more difficult. Yet worse is that many countries lack the infrastructure and resources to shelter and assume the care of homeless persons in an eventual quarantine [8].

The situations of imprisoned populations or people living in detention centres are similar. The spread of the coronavirus will be unimpeded in both overcrowded prisons and detention centres. Chronic diseases are more prevalent and mortality rates are higher in prisons. In many states, just as it is for the homeless, the provision of healthcare services for incarcerated or detained persons is deficient in centres in which the workers might not be prepared for the outbreak of an epidemic [9].

The pandemic is already exacerbating the precarious situation of migrants, refugees and asylum seekers. Now that most countries have closed their borders, people fleeing their countries due to war and insecurity are struggling to find shelter. Migrants have poor access to healthcare services and a large proportion of them do not even have access to clean and safe water. Colombia has almost 6 million internally displaced personas and, in the last few years, approximately 2 million Venezuelans have migrated into the country. The majority of this migrant population lack adequate housing, healthcare and social support. They are also victims of xenophobia and discrimination, being accused of spreading the COVID-19 in the country [10].

On the frontline of the epidemic stand healthcare professionals (HCP), whose workload is increased by the pandemic, as they have to work with limited medical resources. They are themselves highly exposed to infection. These factors, in addition to the frustration of not being supported by a strong health care system and the fear of infecting people around them, increase the prevalence of symptoms of stress, depression and anxiety disorders with long-term consequences, as was seen during the SARS epidemic in 2003 [11]. A study of the COVID-19 epidemic in Hubei, China, conducted among 493 physicians and 764 nurses found that around half of them showed symptoms of depression and anxiety. Many of the participants also reported insomnia, and 70 % psychological distress. Women and nurses – who in great proportion were the first responders - were more affected. It is important to point out that the consequences of working under stressful conditions are not confined to HCP; stressful conditions also compromise their performance in caring for patients [12].

The elderly, who are the main target group of most of the policies of social distancing due to their high risk of presenting complications from COVID-19, need stronger psychosocial support, because so many live in permanent isolation, and do not have social networks and have limited social activities [13,14]. Persons with psychiatric disorders face similar situations because policies of social distancing can worsen their symptoms.

Large families that are financially constrained and live in poor housing conditions are very common in LMIC. The combination of confinement and isolation increases the risk of interpersonal conflict in families, which in turn puts children and women at higher risk of domestic violence for as long as the stay-at-home measures last [15]. Authorities in China have warned families about the consequences of spending too much time together sharing the same space. Appointments to file for divorce rose significantly in March after couples had been under the stay-at-home order for over a month. Experts argue that impulsive decisions caused by daily conflict can lead to divorce [16].

Recently, Human Rights Watch called for the protection of the rights of persons who live with disabilities, who constantly deal with barriers that impair their access to healthcare services. They must receive reliable information on the pandemic and support to adopt preventive strategies [17].

5. Wellbeing

Although a certain level of stress is practically unavoidable when facing dramatic circumstances such as those currently unfolding, wellbeing is a key concept to support and facilitate mental health.

Caring for the wellbeing of individuals is not limited to preventing the incidence of mental health disorders. The onset of symptoms of stress and other psychiatric disorders can affect the immune system. Furthermore, reduction in the expression of positive emotions and the loss of life satisfaction is associated with higher levels of inflammation, which increases the risk of contracting disease [18]. For this reason, experts are making recommendations that can promote mental health and overall wellbeing.

During confinement, it is important to be creative in the ways we maintain meaningful affective and social links. Strategies for doing this can be not only technological; very vulnerable populations, such as elderly persons in nursing homes may not have wide access to the internet and electronic devices affording certain kinds of social support. Community action to alleviate the psychological impact of social isolation is thus even of greater importance. In spite of the imposition of strict confinement routines, nursing homes could risk continuing relatively safe social activities among the elderly to avoid the much greater risk of impairing the overall state of the residents' health.

To reduce anxiety caused by overexposure to news, experts advise that people update themselves on the current situation no more than twice a day, and rely only upon mainstream sources with reliable access to official information. The access of children and minors to the news and mobile devices should be restricted. Scientifically knowledgeable source are opening up accounts on social media so that reliable information, which counters the plethora of fake news, reaches more people [19]. We must emphasize that much remains uncertain about the science and management of COVID-19 and the virus that causes the disease. This will remain the case for some time, and reliable reporting of what we learn should not misrepresent the evolving and provisional state of our knowledge.

To reduce misinformation among vulnerable populations, news broadcasts should be more inclusive, add languages like sign language, and use diverse channels that include television, radio, newspapers, mobile apps and landlines. Information should be communicated in simple language that is understandable by everyone, no matter his or her educational level [17]. Instead of using complex terms and neologisms such as "social distancing", experts recommend giving specific advice. For example: *'you should go to the supermarket only once a week. Once you are there, avoid getting too close to the others'*. States can also collaborate with non-governmental organizations to promote lifestyle changes and establish initiatives that help the most vulnerable populations.

Regarding the provision of specialised services, healthcare systems should explore the use of telemedicine to protect mental health professionals from getting infected, improve the delivery of mental health services, and ensure access to the internet and other means of communication by vulnerable populations [20]. Some countries are already offering psychological assistance via the internet or telephone, and using mobile apps to provide counselling or treatment amid the COVID-19 crisis [12]. HCP should also be trained in psychosocial skills to cope with stress and receive practical training on surveillance and diagnosis of psychiatric disorders [19].

Finally, it is worth considering that, etymologically, the word *pandemic* derives from *pan*, all, and *demos*, people. Greek doctors used this term to refer to that which affects the entire population, and that is precisely the message of this article. We call upon HCP, public health specialists, academics, researchers and policy-makers to engage in communitarian strategies that favour the wellbeing of the population - and especially those who are so often overlooked. All of us share responsibility independent of the state. *'Your wellbeing is our wellbeing'*. Only through cooperation and solidarity will long-term solutions to

pandemic disease and its consequences be achieved.

Contributors

Cristina Mesa Vieira was responsible for drafting of the manuscript.

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Thomas Abel contributed to design and revision of the manuscript.

Conflict of interest

The authors declare that they have no conflict of interest.

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The authors declare that no human subjects were involved in the conduction of this study. Therefore, no informed consent was required. The anonymity of individual data is also preserved according to ethical and international regulations.

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