AMERICAN JOURNAL OF PREVENTIVE MEDICINE AND PUBLIC HEALTH, 2020
VOL 6, NO. 3, PAGE 65–67
10.5455/ajpmph.20200418033345

SHORT COMMUNICATION

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Corona virus disease-2019 pandemic: Planning and implementing a scientific approach to introduce or revoke public health and social interventions

Saurabh RamBihariLal Shrivastava[1], Prateek Saurabh Shrivastava[2]

[1]Member of the Medical Education Unit and Institute Research Council, Department of Community Medicine, Shri Sathya Sai Medical College & Research Institute, Sri Balaji Vidyapeeth (SBV) - Deemed to be University, Ammapettai, Nellikuppam, India

[2]Department of Community Medicine, Shri Sathya Sai Medical College & Research Institute, Sri Balaji Vidyapeeth (SBV) - Deemed to be University, Ammapettai, Nellikuppam, India

ABSTRACT

In order to comprehensively prepare and respond to the public health emergency of the Corona Virus Disease-2019 (COVID-19) pandemic, a number of strategies and actions have been taken by all the nations across the world. It is totally understandable that these measures have been the backbone for reducing the caseload, but we have to assess the impact of lockdown on different domains of life, and thus take a well-informed and scientific decision to relax these restrictions, without triggering the resurgence of cases. Even while relaxing the public health and social measures, it is ideal that a specific protocol should be followed and not all the measures are lifted in one go from the entire nation. In conclusion, in the battle against COVID-19 pandemic, different nations are in the different stages of the disease, and thus the Government has to take decisions about introducing or revoking various public health and social measures based on the local epidemiological indices using a decentralized approach. However, all such decisions have to be done in a scientific manner and support it with better surveillance and community support.

ARTICLE HISTORY

Received April 18, 2020
Accepted May 24, 2020
Published June 07, 2020

KEYWORDS

COVID-19 pandemic; public health; World Health Organization

Introduction

In order to comprehensively prepare and respond to the public health emergency of the Corona Virus Disease-2019 (COVID-19) pandemic, a number of strategies and actions have been taken by all the nations across the world. Till date, 2,074,529 cases and 139,378 deaths have been reported in the affected nations and territories, while the case fatality rate of the disease has increased to 6.7% [1]. Thus, steps have been taken to reduce the spread of the transmission, minimize caseload, and avert deaths due to the development of disease-related complications. However, based on the transmission status of the disease in the nation, the policy makers have either scaled up or scaled down the public health and social interventions [2,3].

Public Health and Social Interventions

Regardless of the settings, the key pillars of the public health response include early identification of suspects, their testing and if confirmed, subjecting them to isolation and provision of appropriate care [2]. In addition, all the contacts of the cases have to be traced, which then are quarantined and all the sections of society should adhere to the standard infection prevention and control measures [2]. Furthermore, environmental measures, physical distancing, travel restrictions, movement restrictions, closure of schools or business, and imposition of complete lockdown are the other important interventions that have been implemented in heterogeneous settings [1–3].

Contact Saurabh RamBihariLal Shrivastava ✉ drshrishri2008@gmail.com Professor, Department of Community Medicine, Shri Sathya Sai Medical College & Research Institute, Sri Balaji Vidyapeeth (SBV) – Deemed to be University, Tiruporur - Guduvancherry Main Road, Ammapettai, Nellikuppam, Chengalpet District, Tamil Nadu - 603108, India.

Adapting Public Health and Social Interventions

It is totally understandable that these measures have been the backbone for reducing the caseload, but we have to assess the impact of lockdown on different domains of life and sector (viz. food security, human rights, financial consequences, support extended by the general population, etc.), and thus take a well-informed and scientific decision to relax these restrictions, without triggering the resurgence of cases [4,5]. The impact of the lockdown can be assessed with the help of a need assessment survey or on the basis of demands of people which people have raised. In-fact, the people from the low socioeconomic status and daily wagers are the ones who are most affected and due to the imposition of the lockdown serious concerns have emerged about their livelihoods.

At the same time, some nations might have to scale up the interventions, in case, the number of the reported cases shows a rise or if the community transmission sets-in. It is important to acknowledge that the range of epidemiological situation and the sociodemographic attributes might differ from one region to another and thus the approach of adaptation of public health and social measures should be a flexible one and tailor made to the individual setting [4]. Moreover, this entire process of adaptation should be executed by a team of experts, which guide the national leaders in taking all the decisions and plan for a smooth adaptation [5].

Scientific Approach

Any decision to introduce or revoke or adapt to the local conditions has to be taken after a thorough risk assessment, which should essentially include the potential risk of relaxing measures, capacity of the nation to detect and offer treatment to people if there is a resurgence, infrastructure, availability of personal protective equipment or other logistics, and the ability to again implement restrictions, if the need arises [4,5]. The decision to relax or impose measures should be based upon the findings of the epidemiological analysis in the nation, or on the ascertaining about the readiness of the health care establishments using the forecasting model released by the World Health Organization [4,6].

Even while relaxing the public health and social measures, it is ideal that a specific protocol should be followed and not all the measures are lifted in one go from the entire nation [4]. The approach should be to lift a specific measure from those areas wherein the incidence of the disease is least or population density is low, and monitor the impact of the relaxation on caseload for 2 weeks, and if everything remains under control, then only go ahead with revoking next measure in a phased manner [4]. However, it should be strictly informed to the people that regardless of the relaxation of these measures, they have to continue with the individual interventions (such as frequent hand washing, social distancing, respiratory hygiene, etc.), failing which the decision of relaxation will be immediately withdrawn [2,4].

We have to acknowledge that the Government, health care professionals, other sectors and members of the community should join their hands and work together with a solitary aim to reduce the acquisition or onward spread of the infection. It is needless to justify the fact that relaxation of any measure will be determined by the quality of the surveillance and the government should ensure the safety of vulnerable population groups before taking any decision to relax or introduce any public health or social measure [2,4,5].

While these steps are being taken, the efforts to reduce the level of transmission to sporadic cases or cluster of cases should be further intensified through breaking the chain of transmission and increasing the surveillance activities in the hot spots [2]. We have to take specific measures to maintain the privacy of the collected data to avoid stigmatization and discrimination against specific group of people. In addition, steps for strengthening the health system capacity, availability of adequate human resource, implementation of prevention & control measures in the workplace, and improving ability to manage the import or export of cases from regions with high risk of transmission should be done [3,4]. Moreover, we have to continue with the screening activities in the general community on an intensive basis to identify all the suspects and subject them to testing so that none of the case go undetected and we don't allow the emergence of a new chain of infection [2,5]. Finally, it is extremely important to ensure that members of the community are completely engaged in all the prevention and control strategies (viz. aware about how restrictions are lifted or imposed, their roles, and the need to not spread fake news) and extend their complete cooperation [5].

Conclusion

In conclusion, in the battle against COVID-19 pandemic, different nations are in the different stages

of the disease and thus the Government has to take decisions about introducing or revoking various public health and social measures based on the local epidemiological indices using a decentralized approach. However, all such decisions have to be done in a scientific manner and support it with better surveillance and community support.

Funding

Nil.

Conflict of interest

The authors declared that they have no conflict of interest.

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