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Is it time to truncate the trusted '3-T Strategy'



¿Ha llegado el momento de truncar la prestigiosa "estrategia de las 3 T"?

Dear Editor,

COVID-19 as a disease has two extreme spectrums. A major part of the disease burden is by the asymptomatic group (85%) majority of whom remain disease free when followed over a period of 3–4 weeks. The remaining 15% are the symptomatic group who are likely to progress and account for mortality and hospitalization. The medical community is caught in the midst of a raging debate on which section of this spectrum to focus on more diligently for better outcomes.

Undiluted thrust by the healthcare on monitoring and timely treatment of the symptomatic group is very likely to reduce mortality. However, symptom-based screening alone fails to detect a high proportion of infectious cases and leads to poor control of transmission. So an approach to include asymptomatic persons could result in better outcomes.¹

In such a context South Korea tested an innovative strategy with great degree of success. The '3-T Strategy' approach involved robust testing, extensive tracking and treating of COVID with mainstay of focus on asymptomatic COVID cases. This as a model has been replicated by many countries with India being one of them with varying degrees of success and setbacks.

When is the '3-T Strategy' likely to work?

- In countries with either less population density, where-in the health system is well equipped to cope up with epidemic spurts in terms of health resources & infrastructure.
- When the prevalence of the pandemic is still not critical and not yet breaching the local cluster transmission phase.
- There is availability of unhindered resources to carry out RT-PCR tests universally during the specified time period whenever there is epidemiological alert of breakout of cases in the community.
- When the health system can provide for stringent quarantine facilities for all asymptomatic positives, contacts and suspects. If the quarantine is non-institutional, a fool-proof technological surveillance system needs to be in place to ensure there is minimal community spread.
- For this strategy to work three core competencies: digital technology, efficient health governance, and civic partnership are critical. In developing countries ensuring these three factors will be the critical components for optimal outcome.

Emerging pitfalls with the '3-T Strategy'

- This strategy worked wonderfully well in South Korea as there was an extremely well thought out, coordinated and meticulously executed programme backed by universal free testing, reliable technological surveillance ensuring

stringent quarantine measures. In India as the infection rates surged, the policies of institutional quarantine of the suspect contacts and asymptomatic was abandoned in a phased manner. Somewhere in the course of this battle rigorous and meticulous contact tracing and quarantines of suspects and asymptomatic COVID has been compromised too to a large extent.

- Systematic review has shown that one time screening of healthy people for SARS-CoV-2 is still likely to miss those who are infected.²
- Recent evidence is indicative of viral load being just as high in asymptomatic as symptomatic patients and additionally, viral loads tend to reduce more slowly in asymptomatic patients. This is a distressing prospect where the burden of the asymptomatic will be much higher than initially anticipated in the community and this suggests the need for longer and more stringent quarantines of all the asymptomatic, a huge logistical nightmare from a practicality viewpoint.
- In contexts of the pandemic surging into cluster transmissions in settings of densely populated countries when technological advances still are not foolproof to ensure definitive home quarantine measures the '3-T Strategy' is unlikely to work.
- Testing the entire community is a mammoth exercise with unquantified economic implications as it is not a one-time exercise. A striking example is the proposal by UK government to carry out up to 10 million covid-19 tests a day by early next year as part of a huge £100bn expansion of its national testing programme which almost matches its expenditure on the NHS (£130bn).³
- In a pandemic as the disease ramps up reaching epidemic scales it is understandable that the health resources get strained with policy paralysis and a breakdown of the system. In such a context this strategy is a logistical nightmare and more-so it is likely to drain resources from critical areas leading to collateral damages as has been evidenced in this pandemic.
- The success of '3-T Strategy' relies on the integrated success of each individual arm. In many instances uncoupling of this leads to dilution of the effectiveness. When one or two of the three arms of strategy gets uncoupled, it is only prudent to review the policy and modify it as per contextual dynamics.

It is imperative that we plan our responses based on how a given regional epidemic situation is evolving and accordingly devise a decision-making on switching from intervention tactics and control measures to strengthening the treatment arm. For instance, during the height of the epidemic the focus should be more on reducing mortality by early identification and treatment of symptomatic cases. In the background of unquantified community spread rigorous contact tracing of asymptomatic and institutional quarantines of asymptomatic suspects is a huge health burden and administrative lapse not many countries can ill-afford to commit. Optimization of control measures rest on the timing and dynamics of epidemic states at which they are enforced. The key in tilting the scales with this pandemic is switching tactics based on surveillance data from microbiological and epidemiological surveillance units on the phase and severity of the local epidemic and evolving our response in accor-

dance. Probable models based on parametrization of disease transmission with possible mitigation mechanisms will aid us in developing model frameworks for the preventive, testing and interventional strategies based on varying local epidemiological scenarios, under specific settings and regional contexts.

This pandemic has necessitated the dire need for every country to review, reassess and reorganize its epidemic response governance. There is a scope for adopting the best practices with flexibility in reshaping these well thought out strategies like the '3-T Strategy' as per the dynamics and regional requirements.

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Informe Belmont. Una crítica teórica y práctica actualizada



Belmont report. A theoretical and practical reviewed

Sra. Directora:

El Informe Belmont de 1979 es el referente bioético sobre los límites éticos de la investigación biomédica en seres humanos hasta la actualidad. Constituyó la respuesta del congreso norteamericano a la alarma social suscitada tras el descubrimiento y posterior difusión en los medios de comunicación del estudio y tratamiento realizado sobre la sífilis en cierto sector de la población afroamericana en Alabama, conocido como «experimento Tuskegee» (1932-1972) o «Estudio de Tuskegee sobre la sífilis no tratada en el macho negro»¹. Con dicha finalidad, en 1974 se constituyó *The National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research* (Comisión Nacional para la Protección de Personal Objeto de la Experimentación Biomédica y de la Conducta), presidida por el Dr. Ryan, director médico del *Boston Hospital for Women* y constituida por un equipo interdisciplinar de 10 miembros pertenecientes a distintas disciplinas, desde personal sanitario a filósofos, juristas, psicólogos y líderes de los derechos civiles. El resultado fue el citado Informe Belmont, breve texto constituido por una docena de páginas que podría desglosarse en 3 partes:

- Primera parte. Un texto introductorio, en el que se pretendían identificar unos principios éticos generales que actuaran como marco ético referencial para su aplicación concreta en situaciones específicas de especial relevancia bioética.

- Segunda parte. Constituye el elemento central del texto, en el que se formulan los 3 principios que han de garantizar toda investigación biomédica: el respeto a las personas (manifestado en el principio de «autonomía», cuya expresión legal es el consentimiento informado), la «beneficencia» o máxima bioética por la que se garantiza el no causar daño al participante de la investigación por medio de la maximización de los beneficios obtenidos y la disminución de los riesgos requeridos para tal fin, y la «justicia», concepto equiparable al de la «equidad», por el que se establecen los principios de la distribución «de beneficios y cargas» aplicado a los sujetos participantes.
- Tercera parte. En ella se establecen los procedimientos que garantizan en la práctica el respeto a los principios expuestos. Podría afirmarse que representa el mecanismo de aplicabilidad de dichos conceptos teóricos (principios bioéticos) en determinados supuestos prácticos y, por tanto, susceptibles de crítica y mejora.

En la actualidad, y pese al tiempo transcurrido, el mencionado informe sigue constituyendo un documento de referencia respecto a los aspectos éticos de la investigación biosanitaria. Distintos factores contribuyeron a su vigencia. Desde su carácter interdisciplinar, que integró distintos puntos de vista de la sociedad (al eliminar posibles «sesgos profesionales») hasta el empleo de una metodología basada en un extenso trabajo de campo, a través de la revisión de casos, que permitió el conocimiento de problemas específicos como base para establecer de forma sólida sus 3 principios bioéticos teóricos fundacionales y la diferenciación de sus posteriores mecanismos de aplicación en la resolución de conflictos particulares.

Pese a la incuestionable importancia del mencionado documento, el objetivo del presente estudio pretende establecer una reflexión crítica razonada acerca de ciertos