

# THE TRIPLE ZONE OF HEALTH AND NATION DEFENSE INVESTMENT

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The concept of national defence health advances to the era of pandemic continuity and information disclosure to realize a Triple Zone of health policies based on infection travel, community health and health intelligence (geospatial intelligence).

Infectious diseases, in this case, Covid-19, exemplify transboundary diseases that are globally transformed into national issues, affecting not only clinical management in hospitals, but also dynamically moving this viral mutation variant and creating other community infectious diseases. The current Covid-19 pandemic infection is a transformation of the Nir Yudha battle, which is an infection asymmetry caused by population migration that influences microbial evolution. The cascade of infection requires both the body's immune defence and community immunity, specifically hospital preparedness and community readiness in the form of surveillance and infection control practices that adapt to increased vigilance. Both immunity deterrents are based on the strength of the body's internal system, specifically the ability to mount an immune response and the presence or absence of comorbidities, as well as the external system, particularly the environmental and global health situation.

Capabilities for predictive and protective measures against an emerging infectious disease such as the plague are interlinked with research lines focused on agent-host and environmental interactions, as well as broader community circles encompassing those interactions: 1) Agent (chromosomes, plasmids, genes), Host (pathogenic multiplication), and Environment (transmission cycle); 2) The body's immune response (lymphoid organs, immune cells, humoral factors and cytokines); 3) Hospitals (bacterial pathogens with evasion and mutation, Sepsis and MDR Antibiotics), 4) Community (outbreak conditions), high positivity rate transmission and OTG and vaccine effectiveness). The underlying concept is that we ought to accurately pinpoint the location of the virus' attack vector and entry point rather than going into a war with it.

The infection management strategies within the Triple Zone framework strengthen research as the main thrust for infection in a predictive and protective context, allowing us to achieve a better learning more consistently and be capable of helping us deal with combat as an axiology of the epistemological process of Covid-19 infection journey. The quality control

of community infection conditions and the reduction of severe infections (hospital sepsis) are both within our capabilities.

Community prevention measures as the second line of defence against the pandemic is a strategy to prepare for the independence and sovereignty of the nation. Community health attempts to empower the community as a participatory disease control mechanism and aims to build an interconnected network of community safety to optimize environmental health control systems. An approach that links assessment, infection control practices, and community preparedness is represented by community risk mitigation that includes infection prevention activities in social institutions, self-sufficiency, and social cohesion. Community prevention can act as a catalyst for alternative solutions by supporting medical facilities and blocking the spread of disease.

The term "geospatial health intelligence" refers to the use of geographic information systems (GIS) as an important component of health information. It uses surveillance analysis to integrate or link data from the villages to the centres (statistics and epidemiology). The data integration is manifested through the support of health technology and natural resources as a technological device developed for educational purposes. It is used to understand health security through policy and thinking systems in the implementation of the management of emergency conditions (outbreaks).

Resilience in rapid detect-respond and prevention, within the framework of defence health epidemiology, will lead to dynamic nuance in geographic health intelligence. Rapid information connectivity and dynamic management of emerging outbreaks are both qualities that need to be built. Detection is conducted through 1) mapping threats and risk mitigation; 2) detecting invasive species; 3) preventing spread; 4) managing information feedback. Response is an authority mechanism through planning, coordinating, and monitoring relative risks and potential outbreak localization. Prevention is focused on 1) antibiotic resistance, 2) zoonoses, 3) biosafety and biosecurity, and 4) outbreak mitigation.

Health endeavours are an important facet of circulation of health intelligence. That information flows through military medicine's network, which then bolsters public health activities.

### **National Health Resilience Investment**

Controlling the nation's health can be made possible by the growth of independent living to show the nation's strength in the realm of health services, namely hospitals built on a solid foundation of national roots. The philosophical foundation of health care is to build national roots. It is about believing in health care as a noble value and developing health care policy around macro-based concepts, including patient safety and life quality.

The central concern of health care is patient safety, which includes both the process of achieving goals as well as health care policies. First, empathy should be the key mindset that health professionals must have when developing excellent facilities, human resources (HR), and diagnostic and therapeutic speed and accuracy. Second, a focus on the patients and their wellbeing that are reinforced with regular education and information until they understand the health system and when the patients receive treatment in phase and post-pandemic referral hospitals.

The principle of the resilience of health services in hospitals is based on national and nationalism spirit which is further based on the principle of Science of Human Being, Evidence-Based Medicine, Plan of Care and High Reliability Organization (HRO) as the spearhead of the nation's health service strategy supported by acceleration synergies, education, and research.

The aim of referral hospitals is to develop their capacity related to disaster response based on the perspective of biological risk and threat and to create tangible policies when facing pandemics as transboundary diseases that transition nationally and globally. It is important that institutional leaders support the referral hospitals so that these hospitals can reinforce community-based risk strategy policies and laboratory biosafety standards. The policies should be implemented dynamically through adaptive risk management that consists of biosafety, risk assessment for infectious material characteristics, design of a multidisciplinary approach to biosafety-biosecurity and sustainable ecosystem technology.

To maintain the 'toughness' of current hospitals, health investment is necessary. It is a way to develop technology and the economy, which are crucial in defence health. This renewable energy is a process-driven change that involves technological innovation to capture the digital footprint of the community to participate in the health management system, particularly at the level of Posyandu in every village. Community participation in the health system can bolster the capacity and resilience of the nation.

As a gateway to fulfilling the health requirement in the national resilience system, making health investments, and being prepared for emergencies by planning and digitizing the health development network are pivotal to reinforce the capacity and potentials. The expected energy is the policies and cultures that define civilization (e.g., policies, cultural life) and carry civilization's momentum (behaviour, lifestyle) and assist it to flow out of its component parts (healthy behaviour and life quality). Acceleration of bureaucratic synergy and public participation provides an easy bridge to help achieve quality of public health. To provide for the overall health of the nation, two critical resources must be maintained: kinetic energy and potential energy.

Toughness, independence, and investment in the hospital service. The ability of hospitals to address preparedness will depend on their ability to provide services that have a unique perspective on the construction of disaster response services, namely services that have a SWOT analysis of human resources and infection prevention and control. Planning and empowerment will promote ideals – the opportunity to examine mortality and morbidity risks, comorbidities, and susceptibilities, as well as empower medical response, include public monitoring of post-covid patients, and protect health workers.

The pandemic referral hospital as the gateway to the nation’s defence health in the future requires a comprehensive plan, namely an evaluation and monitoring cycle for performance risk management, education, and training by implementing contextual, conceptual, and technical capabilities, and continuous engineering control, ready to use health service infrastructure and other supporting equipment.

The accountability of referral hospitals in the phase and post-pandemic is the extent to which investment in the nation’s health rests and circulates to empower trusted organizations, science, evidence-based medicine, and measurable planning as a gateway to national defence health.