

ROBUST HEALTH SYSTEM AS INTANGIBLE FRAMEWORK FOR STRENGTHENING LABOURERS HEALTH & WELLBEING: AN INDIAN VIEWPOINT OF DISASTER RISK MANAGEMENT

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ABSTRACT: In engagement settings, examination capacities have frequently been ignored as assets are diverted to alternative needs, such as addressing enhanced illness, impermanence and health system challenges straight and/or circuitously associated to general workers public and had not given much importance on health of labour workforce of nation. This has had an adversative long-term impression in such prolonged disaster effects similar to those found in the developing nation like India, where focus on backbone i.e. labourers resilience have regularly been conceded. In this paper, we suggest an intangible frame for consolidation of organized as well as unorganized workers health system to enable them become disaster resilient.

KEYWORDS: Resilient Health System, Disaster Risk Management (DRM), Intangible frame work, India,

I. INTRODUCTION

In many developing countries like India, generally half of labourers work in the casual sector, where there is no societal fortification for receiving basic health care facilities and there is no monitoring execution of occupational health and safety standards of these labourers. Occupational safety and health facilities are generally formulated to advise establishments on improving operational conditions and observing labourers wellbeing cover mostly large entities in the formally organized sector, but around 85% of labourers in small businesses, the unorganized sector, agriculture, and migrants worldwide are uninsured (WHO, 2006). Certain work related occupational hazards, like workplace grievances, carcinogenic agents, floating particles, and ergonomic hazards, contribute significantly to the burden of chronic diseases: Back pain accounts for 37% of all cases, hearing loss accounts for 13%, chronic obstructive pulmonary disease accounts for 11%, asthma accounts for 11%, injuries account for 8%, lung cancer accounts for 9%, leukaemia accounts for 2%, and depression accounts for 8% (Fingerhut, 2005).

Non-communicable diseases kill 0.0122 billion people per year, commonly in emerging countries, while they are still of working age (Gani, 2009). Most countries lose 4-6 % of their GDP due to work-related health problems. Basic health services to prevent occupational and work-related diseases cost an average of US\$18 to US\$60 per worker (in purchasing power parity). Approximately 70% of workers lack insurance to compensate them in the event of occupational diseases and injuries (Kongtip, 2015). According to research, workplace

wellbeing ingenuities can help decrease sick absenteeism by 27% and wellbeing costs for businesses by 26%(Aldana, 2005).¹

Catastrophes whether natural or technological, pretence major encounter to social health and development in evolving economy; their impacts on the wellbeing of labourer are often unadorned and could delay achievement of national, regional, and global improvement initiatives(Collins, 2009). Recent catastrophes in India pertinently illustrate the multifaceted interface between public wellbeing systems and catastrophes; a malicious cycle in which feeble wellbeing systems provide luxuriant grounds for deterioration of communal health and natural hazards into catastrophes while on the other hand, catastrophes further destroy already weak wellbeing systems(Nomani M. Z., 2021). The sustained diffusion of the Corona virus outbreak in India was dependably linked to the feeble wellbeing systems for the workers of this nation(Kumaran, 2021). The eruption resulted in the demise of several industrial, constructions workers etc(Sarmin, 2021), exhaustion of scarce financial resources, alteration of medical equipment. This in accumulation to overloading of already weak wellbeing public wellbeing and health information and supply chain controlling systems resulted in disturbance of health services delivery in countries like India(Sahay, 2020).

Other disasters such as the Nipah virus (NiV), an extremely pathogenic Paramyxovirus, are one of the ten precedence pathogens by World Health Organization Research and Development blueprint 2018 which also blowout to some parts of India(Soman Pillai, 2020). In India, NiV had caused outbreaks in Siliguri and Nadia districts, West Bengal state with case fatality rate (CFR) of 68% and 100%. The nationob served NiV outburst in Kozhikode district, Kerala in 2018 with CFR 91%. This outburst upraised an alarm for strengthening the wellbeing of public health system for an operative reply to such emergencies(Thomas, 2019).

The Sendai Framework for Disaster Risk Reduction (SFDRR) and Sustainable Development Goals (SDGs), both historic United Nations accords adopted in 2015, call for expanding the use of disaster risk reduction (DRR) policies to increase global flexibility to failures(Chisty, 2022).In comparison to the Hyogo Framework for Action, the SFDRR focuses more emphasis on fitness(Tozier de la Poterie, 2015). Resilient fitness structures are suggested as a way to ensure strong DRR inside the fitness zone. Through resolution 64.10, the World Health Assembly urged countries to strengthen disaster risk management (DRM) programmes by incorporating them into national health systems(WHO, Role of WHO in managing emergencies, 2012). The Approach for DRM inside the disaster Zone and the 2008 Ouagadougou Declaration on Primary Health Care has to be utilized as a conceptual foundation for community fitness Disaster Risk Management in the aforementioned literature presents a persuasive justification for the use of resilient public wellbeing health systems targeting industrial or non-industrial workers(Olu, 2017).

Recently, there has been an increase in calls for the use of robust wellbeing system for workers as the foundation for workers well being in DRM; however, there may be a lack of realistic

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guidance, necessary tools, and abilities for integrating DRM into longer-term health packages in workers health settings in India(Prinja, 2020).

In the Ministry of Health and among their counterparts in Disaster Management, this frequently results in the parallel implementation of workers health structure strengthening and workers health DRM packages with duplication of effort and a lack of synergy(Nomani M. Z., 2021).This paper provides insights into how a robust workers health framework and DRM interaction highlights the intersection between the two.

II. THE HEALTH SYSTEM FRAMEWORK AND DISASTER RISK MANAGEMENT (DRM) FOR LABOURERS

DRM is described as the practise of organizational and working processes to undertake intrusions targeted at decreasing the negative effects of catastrophes. The wellbeing system is made up of "all organisations, people, and activities whose main objective is to endorse, reinstate, or sustain health(Unger, 2020)."The social factors of wellbeing, or the conditions in which individuals are born and develop, are included in the health system together with all direct health-improving actions carried out at home, in the community, at the formal health sector level, and in the recognized health sector(Braveman P. &, 2014).Health service distribution, wellbeing personnel, wellbeing information management, healthcare products including vaccines and technologies, health sponsoring, wellbeing leadership and targeted governance are the six components that make up the health system framework for workers (Figure 1).

Wellbeing System Framework for Workers					
Service Delivery	Workforce	Information Management	Monetary arrangement	Leadership	Governance
1	2	3	4	5	6

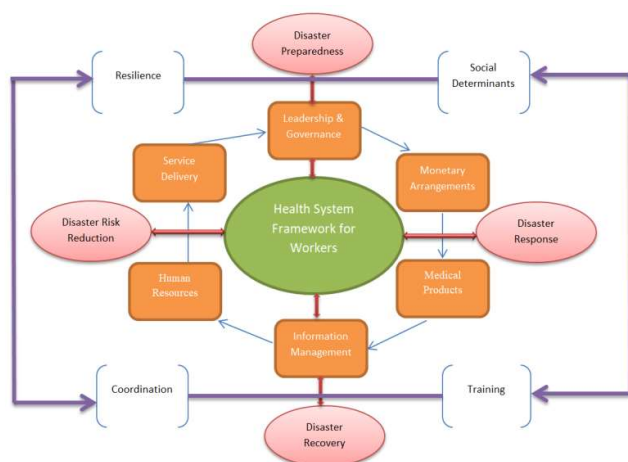


FIGURE 1 Wellbeing system building blocks serve as a conceptual framework for managing public health disaster risk.

Table 1 Application of the health system framework to the risk management of workers health disasters (WHD).

Health system framework building blocks	Disaster Risk Management elements and workers health disaster interventions			
	Risk reduction	Preparedness	Response	Recovery
Leadership and governance	<p>DRR integration into current national health policies and initiatives</p> <p>Institutional development for community health DRR</p> <p>Coordination committees for DRR in workers' wellbeing are being established.</p> <p>DRR units are designated in health departments.</p>	<p>Establishment of an institutional framework for workers' health preparedness for disasters</p> <p>Planning for workers' health emergency scenarios</p> <p>Simulated activities</p> <p>Plan creation for business continuity</p> <p>Establishing dedicated emergency coordinating systems for workers' health</p>	<p>Plans for workers' health catastrophe response are being developed with involvement from all health programmes and associated industries.</p> <p>Creation of committees to coordinate workers' health emergencies</p> <p>Monitoring, and assessment of the emergency health response for workers'</p>	<p>Establishing frameworks for coordination in the execution of health system recovery initiatives for workers'</p> <p>Update and revise hazard-specific emergency plans focusing workers'</p> <p>Enhancing governmental regulatory functions facilitating the assessment, updating, and implementation of policies and recommendations for various health programmes for workers'</p>
Monetary arrangement	<p>Creation of a plan for universal health care during emergencies for workers'</p> <p>Allocation of monetary</p>	<p>Developing a plan for universal health care during catastrophes</p> <p>Finances allocated to</p>	<p>Allocating money for disaster relief in workers' health</p> <p>Implementing the framework for universal workers' health</p>	<p>Funding and resource allocation for the restoration of the workers' health system</p> <p>Allocation of funding for the</p>

	facility to workers' health DRR	DRR for workers' health	coverage, along with health insurance and financial risk mitigation strategies	creation of long-term health finance structures, such as social and community insurance for workers' and their families Establishment of procedures for monetary harmonization and culpability, and the strengthening of government financial management systems for workers'.
Medical products, vaccines, and technologies	Risk evaluation of health supply, tools, and vaccination stocks as part of workers' health Assessment of susceptibility and risk and mapping of workers'. Proper placement and storage of medical supplies, drugs, and equipment for workers'.	Creation of a list of critical medications, emergency medical supplies, etc dedicatedly for workers. Purchasing and deploying emergency medical kits for workers'. Establishing a quality control system for kits, vital	Obtaining and deploying medical supplies, personal protection equipment, and emergency health kits for industrial workers. Consolidation of the supply chain system for PPE, emergency medical aids, and other	Bolster the system for managing the supply chain for organized and unorganized workers. Establishment of quality control procedures for drugs, vaccines, and equipment for workers and their families. Creation of a list of necessary medications, the

		<p>medications, etc. for organized and unorganized workers.</p> <p>Creation of supply chains for pharmaceuticals, vaccines, and medical supplies for labourers.</p> <p>Creating and implementing a donation policy for supplies and medical equipment for workers'.</p>	<p>necessary drugs for organized and unorganized workers.</p>	<p>formulation of dosage guidelines, and the education of health professionals who are serving for workers health.</p> <p>Strengthening maintenance functions and abilities and standardising medical equipment according to care levels of for organized and unorganized workers.</p> <p>Improve the cold chain for organized and unorganized workers.</p>
Information management	Hazard Risk & Vulnerability assessments for organized and unorganized workers health emergencies Health Facility Safety Index surveys implementation targeting for organized and	<p>Establishing early warning systems for organized and unorganized workers.</p> <p>establishing a system for continual workers health surveillance (for things like diet and diseases)</p>	<p>Quick health evaluations for organized and unorganized workers.</p> <p>Active disease surveillance system establishment for workers health incidents .</p>	<p>Assessments of post-disaster health needs for organized and unorganized workers</p> <p>Improve disease surveillance and health information management systems for</p>

	unorganized workers.		Mapping the availability of health services for organized and unorganized workers Specialised surveys, including nutrition and mortality surveys for organized and unorganized workers Organized and unorganized workers monitoring	organized and unorganized workers Capacity assessments for health disaster risk reduction. Health services availability mapping for organized and unorganized workers.
Human resources for workers health	Assessment of human resource training requirements for organized and unorganized workers Health disaster risk reduction training for health workers Infection prevention and control training	Human resource terms reference development for organized and unorganized workers Rapid health response teams targeting on workers must be identified and trained. Establishment of an emergency organized and unorganized	Redeploying existing medical professional. Additional medical professional recruitment and deployment Setting up a system for medical protection (infection prevention and control)	Evaluate the disaster's impact on medical professional. Participate and scale up capability for the required public workers in health service delivery. Packages for establishment supervising recruitment, training, and retention

		workers health expert roster		<p>Improve fitness training centres to expand the medical professional pool</p> <p>Create a job based flowing system.</p>
Service delivery	<p>Renovating at risk wellbeing care facilities</p> <p>Building codes for health care facilities are being reviewed.</p> <p>Utilization of hazard administration data to escort the placement of community wellbeing & health infrastructure</p> <p>Organized and unorganized workers mitigation activities and public health awareness campaigns</p>	<p>Hazard communication in organized & unorganized workers health</p> <p>Evacuations and the establishment of sites, management and isolation facilities, or shelters</p>	<p>Medical evacuation and public casualty administration</p> <p>Construction of temporary workers health facilities</p> <p>Hazard communication in workers' health</p> <p>Primary health-care services are provided.</p> <p>Immunization, bed nets, and other public preventive services</p> <p>Unique wellbeing health services such as psychosocial care, communicable</p>	<p>Create or revise a basic public wellbeing package to solve the current post-disaster/conflict situation.</p> <p>Focus on parity issues such as ethnic, gender, age, and other community factors that have a negative impact on service utilisation.</p> <p>To improve access, develop and disseminate behavioural change communication strategies.</p> <p>In order to improve service coverage, implement workers</p>

			disease treatment etc.	community-based initiatives.
			Water and sanitation assistance in health care facilities	
			Water quality monitoring used by organized and unorganized workers	
			Infection control and prevention in organized and unorganized workers	

A resilient health system for stakeholders especially workers or labourers is one that can effectively prepare for, cope with, and answer to the community health & wellbeing consequences of catastrophes(Kruk, 2015).Irrepressible health wellbeing systems can save themselves and people from the community health consequences of disasters, and they are precarious to achieving good health outcomes pre, during, and post disasters.

Siekmans and colleagues identified public based health care as avitalparameter of a resilient health system. Resilient health systems should be aware of their building blocks' strengths and vulnerabilities, as well as the range of hazards and risks to which they are exposed(Siekmans, 2017). They should be able to address a wide range of public health issues before, during, and after a disaster.

Health systems should be able to adapt to changing situations quickly and effectively, and they should use integrated approaches to responding to public health events such as disasters. Finally, a resilient wellbeing health system should be self-regulating. These components provide a solid foundation for strengthening and utilising the health system for workers health and disaster risk reduction.

III. BASIS FOR HEALTH DISASTER RISK REDUCTION, RESILIENT HEALTH SYSTEMS AND SOCIAL DETERMINANTS OF HEALTH ORGANIZED AND UNORGANIZED WORKERS

Lessons from the Corona and Nipah virus outbreak demonstrate how a disastrous situation may quickly convert into a catastrophe in the face of a weakened health & wellbeing system especially for organized and unorganized workers. Resilient health systems, on the other hand, may reduce vulnerability to disaster-related workers health consequences (Fussell, 2018). Robust supply chain management systems for supplying vital medicines, benign health facilities, and an adequate number of trained health staffs would ensure the provision of continuous basic health-care services to emergency-affected workers populations in the aftermath of a disaster (Dolinskaya, 2018).

Practical health information management systems focusing labourers would provide the information needed for timely detection and response to the presence of man-made hazards or diseases such as cholera, typhoid fever, watery diarrhoea, measles, and other diseases that frequently occur as a result of disasters. It will also help to predict impacts of disaster that are indirectly related to organized and unorganised workers crisis with the utilization of advance techniques (Nielsen, 2016).

Adequate funding for emergency health service programmes, as well as strong health & wellbeing determination and oversight systems, would guarantee that monetary, and logistical resources are available and used to devise a well-coordinated DRM strategies to mitigate the disasters of workers health consequences (Ehrlich, 2021). Disease outbreaks among disaster-affected workers population could be avoided if key health interventions such as immunisation, insecticide-treated bed nets, clean water, and improved sanitation were delivered effectively. During a disaster, these would help to improve workers health outcomes (Charnley, 2021).

Operative procedures to discourse the workers' health & wellbeing consequences, like good vaccination coverage, passable nutrition, and health wellbeing service delivery, including managing of clinical acute malnutrition, on-going observation of nutrition indicators, and operative hazard communication about malnutrition, would make sure that such situations did not regionalize into famines (Braveman P. E., 2011). Likewise, safe and well-located health facilities, good crisis mitigation in the labourer's health sector, contingency and business continuity planning, adequate essential medicines and supplies for trauma care, and well-trained health staff would ensure that the consequences of natural disaster emergencies do not result in major workforce health disasters.

As a result, the applied application of resilient health & wellbeing systems for labourers as a guideline for strengthening workers health disaster risk mitigation is a must in developing nation like India. This requires establishment and application of the six labourers health system building blocks as components in the implementation of workers health disaster risk reduction, readiness, response, and recovery intercessions at the individual, their community, and workers formal health sector levels (Table 1).

Aside from deprived health wellbeing systems, inadequate social factors such as poverty, a lack of adequate housing, less admittance to proper nutrition, hygienic water, enhanced

sanitation, schooling, and societal protection may reduce individual and community resilience and increase disaster risk for workers (Figure 1). As a result, optimal social determinants of health and resilient workers communities are required for mitigating the health risks and consequences of disasters.

IV. CONCLUSION

The preceding highlights a weak health system as a key factor determining workers health disaster risk in India and other analogous settings. As a result, workers health disaster risk mitigation programmes should prioritise resilient health systems targeting organized as well as unorganized workforce of nation. This necessitates the use of inventive mechanisms that are tailored to the Indian workers context in order to strengthen the resilience of health wellbeing systems and labourers communities. This could be accomplished by employing important elements of consciousness, assortment, self-regulation, incorporation, and flexibility in improving workers health system post disaster.

Furthermore, the community factors would need to be reinforced as a foundation for supporting labourers health and disaster risk management in India. Furthermore, in order to realmon the gains made during the Millennium Development Goal age and contribute to the achievement of comprehensive and regional improvement goals such as the SDG and prime Minister's ten point Agenda, Indian health wellbeing systems should be protected from the negative impact of disasters.

These necessitate quality steps. First, developing Asian countries like India should demeanour independent assessments of their labourers health wellbeing systems' resilience in relation to their capacity for disaster risk management on a regular basis, by accompanying health wellbeing vulnerability and risk assessments as part of a mutual outside assessment in line with the International Health Regulations fundamental capacities. Second, developing countries like India should cultivate and put into action practical policies, tactics, and procedures to strengthen health wellbeing systems and labourers resilience. Disaster risk management approaches should also be institutionalised in long-term workers health system development programmes.

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