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RESEARCH ARTICLE

Health Care Management During Covid19: Learning from doctor administrators from urban and rural medical college A Viewpoint

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Abstract:

Covid-19 pandemic created a multitude of acute challenges for health care delivery ystems, including inadequate infrastructure and special logistics, supply shortages, the need for care redesign, and financial loss. Complexity science views health care delivery ystems as complex adaptive systems that operate in highly complex and unpredictable environments. The perspective assumes that much of ystemal life is unknowable, uncertain, or unpredictable and thus cannot be standardized and controlled. A surprise event can be characterized in three dimensions: the complexity of its source, the speed of its spread, and the unpredictability of its scale and impact.1 The Covid-19 pandemic is a powerful reminder that we live in a highly complex and unpredictable world. For health care delivery ystems, systematic responses to the pandemic have required departures from many conventional practices. The Covid-19 pandemic has presented an array of novel and acute challenges, from managing the supply chain for personal protective equipment (PPE) to adjusting workforce infrastructure and special logistics to coping with financial loss. In the midst of these challenges lies an opportunity for health care leaders to better position and transform their ystems for a future of unpredictable surprise. Key Challenges for Health Care Delivery Ystems

Infrastructure, special logistics, special training for staffs, management of support staffs

Massive social and economic loss d/t continued blockades H.C.Delivery system is highly complex and unpredictable

Special need for medicines, unavailability of proper PPE KITS,UNKNOWN COURSE AND DISEASE

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1 | SEVERITY

Staff shortage due to being untrained and going on quarantine Dealing with pandemic in comprehensive way, addressing fear, bearing stigma and discriminant behaviours, social continuous lockdown led to economy breakdown and patient isolation Loss more to private sectors as all sector closed, NO FUNDS Govt. sectos overburdened as had to run all along with ne Woovid SETUPS LIKE COVID CARE HOSPITALS SEVERE CASES AND COVID CARE CENTRES FOR MILD CASES. Alo loss in terms of morbidity, mortality. Expansion of CCC, Preparedness for it, Training, Retraining of manpower Problems faced on face suddenly, handling political positions, handling media Long term can be done-Need continuum of care/comprehensive care. The decision tree made carefully. Community support, awareness, health communication, sustainability ensuring of preventive behaviours adopted, dressing stigma, managingreferrLS TO Lab. Tech supports to centres Pt.Care transformation - Earlier 1 patint positive, entire country quantined, movement stoppe/restricted, later 1 pt.positive, he isolated....Quarantine to Isolation Handling pandemic with properly planned flowcharts, organograms, guideines, expert teams with local customized modifications Strategy of Track, Trace, Treat—in combination withcare of 100 contacts, potential case isolations Stigma addressal/ awareness and adoption of preventive behaviours/ sustainability/Continued advocacy/SIE-Mobilization/H2H Surveys with funds n time n manpower n political will with administrative backups, follow up feedback monitoring system established Lessons Learnt – Critical care at all levels, community support at all levels, Build a cadre of doctors trained for the purpose Applying infectious disease modelling Organising hands on workshops and inviting deliberations from doctor administrators who heled in cse streamlining and facilitating uninterrupted care Teaching pandemic preparedness to junior tier for future Health care delivery ystems have faced a myriad of important management challenges during the Covid-19 pandemic. Some of the challenges are idiosyncratic to the individual ystem; others, however, are broadly faced by almost every health care delivery ystem and are likely to be faced in any major disaster.

Corresponding Author: Dr.Nilanjana Ghosh Assistant Professor, AIIMS Guwahati The first key challenge is the lack of adequate infrastructure and special logistics to handle the surging patient volume. In many places, the need for intensive care unit (ICU) beds and ventilators as well as staffing far exceeds the maximum infrastructure and special logistics.

A second challenge is the need for real-time redesign of care models for patients. Given the highly contagious nature and severity of the infection, it is necessary for physicians, nurses, and other clinicians to discover the appropriate care model and room design.

A related challenge is protecting the physical and mental health of frontline staff. Hospitals and clinics have to ensure an adequate supply of PPE for their staff. In addition to the risk of contracting the virus, frontline staff have to cope with tremendous mental stress, which some may find unbearable.4 There have been anecdotal reports of frontline staff dying by suicide.

Another challenge for hospitals and clinics during this pandemic is the financial loss due to the cancellation of elective procedures and the disruption of routine care, particularly for hospitals already in financial difficulty.5 To manage infrastructure and special logistics, financial loss, and care redesign, health care ystems have made the critical decision to release or reduce workforce or to shift many employees to remote work, including clinicians working with telehealth technologies. Rightsizing and retraining workers is difficult in normal times and is even more difficult when changes need to be implemented expeditiously.

These four challenges are likely to arise again in any future surprise event. Whether the event is a natural disaster, terrorism, or a pandemic, health care delivery ystems will be challenged to suddenly adjust infrastructure and special logistics, redesign care, manage financial loss, and redeploy staff.

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2 | TENETS OF COMPLEXITY SCIENCE

Faced with this unprecedented combination of acute challenges, health care ystems can draw guidance from the field of complexity science. Complexity science is the multidisciplinary study of complex systems that are composed of interacting agents and units within a boundary. These systems are complex in the sense that the agents and units within the system are highly interdependent, heterogeneous, and dynamic.

INNOVATIVE JOURNAL

Complex systems include ystems such as hospitals, health systems, and medical practices, as these ystems are comprised of highly interdependent, heterogeneous, dynamic, and interacting agents and units. Of particular interest in complexity science is how complex systems change over time, or adapt, in response to external environmental changes.

Sensemaking is a key activity in complex adaptive systems. Sensemaking is the process by which people give meaning to their collective experiences: "the ongoing retrospective development of plausible images that rationalize what people are doing."8 A multidisciplinary team that included representatives from the departments of patient care, information technology, human resources, and occupational health was established to facilitate the redeployment of nurses. Another multidisciplinary team was formed to engage with outside entities in the recruitment of clinicians from across the country.

The system leadership gave a clear direction that the entire system would need to "become a single large ICU" through patient transfers, staff redeployments, and space reassignments.3 The pandemic accelerated the expanded use of information technology to improve the connectedness of all elements within the system and facilitate real-time information sharing.15 During the Covid-19 crisis, health care ystems that have emphasized communication, connection, and innovation have effectively addressed the challenges to adjust infrastructure and special logistics, redesign care models, redeploy staff, and overcome financial loss.Complexity science also provides a framework for learning from disasters. Any future disasters will require health care ystems to face challenges that will be different in detail, even while similar in pattern. Health care ystems, particularly those that have entered the recovery and rebuild stage, can use the Covid-19 pandemic as an opportunity to transform into more agile and resilient learning systems.

Specifically speaking about rural medical college located in a periphery 600 kms away from the main city it has its own constraints and set back. Rural medical colleges like situated in foothills of Hima;ays had their own set of issues. Distance from main city, transport closed, any logistics and information reaching late, local people entirely dependent on the college, less resources, so if few covid affected huge burden on others, Among the benefits counted are unanimous decision, strong leadership, team work, every set up working autonomously yet in coordination, easy as we all knew one for each other, implementing preventive health interventions and other laws easier, district working in close coordination, telemedicine developed Regarding another college located in heart of the city in far North Esat- The entire college was transformed into COVID

Hospital with redesigning of blocks, fitting oxygen plant, creating ICUS, huge staff deployment for the cause, working 24*7, catering all patients coming along with running regular activity, regular meetings with district and state, creating dedicated triaging to identify and treat the cause, preventive interventions running. However being centrally located burden of expectations and constant monitoring grom centre was a challenge to put up. COVID created fear and stigma mong generl people hence handling patenst, staffs, media was an issue. Exemplary leadership skills, team work, dedication, liaso helped tide over the crisis

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