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Patient Safety during COVID-19

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Patient Safety

- ‘the prevention of adverse events associated with health care to achieve zero avoidable patient harm’ (WHO, 2020)
- A benchmark for the well-functioning health systems and a fundamental element for achieving universal health coverage (UHC).

Six building blocks of health systems

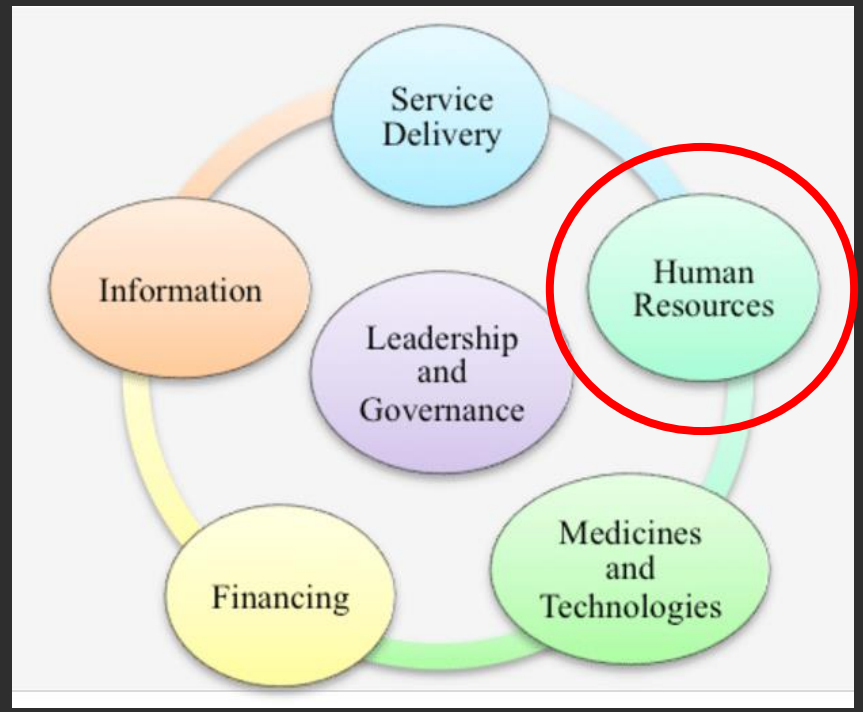
(Biddle et al., 2020; WHO, 2010).

Current Gaps in the Health Systems and Potential Impact on Patient Safety

Gaps in service delivery

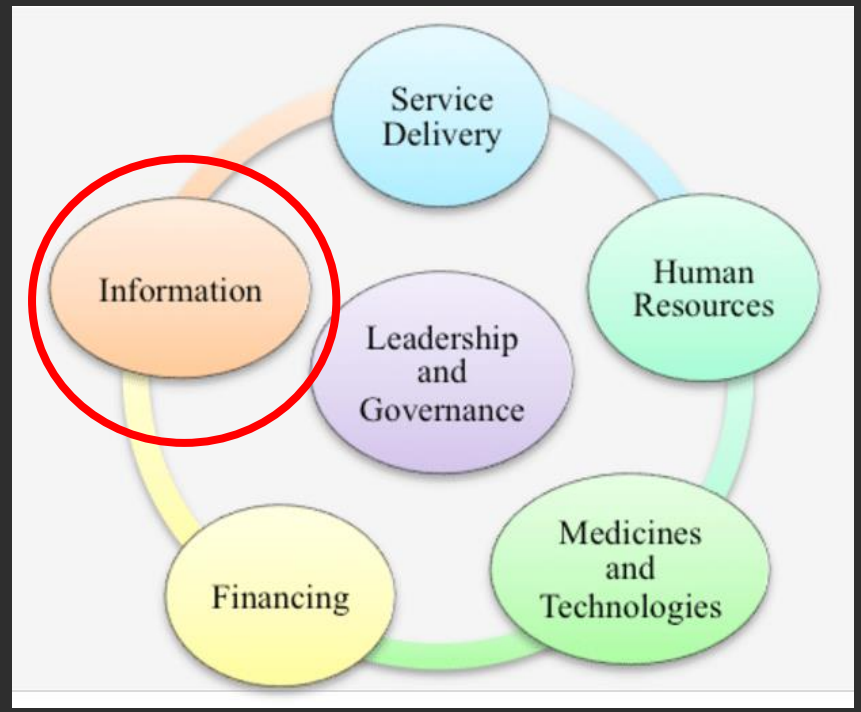
- Inadequate public health infrastructure
- Scarcity of hospital
- Isolation and ICU beds
- Inadequate triage and testing facilities
- Limited physical space and ventilation
- Lack of separate entry and exit gates
- NCDs, other inf. Dx , Caner care, Electives
- Increased the risk of healthcare associated infections (HAI) amongst patients seeking care

Dwivedi, L., Rai, A., Dey, T., Ram, U., & Yadav, S. (2020). Assessing the impact of complete lockdown on COVID19 infections in India and its burden on public health facilities.Demography India,49(Special Issue),37–50.


Service Delivery
Information
Human Resources
Leadership and Governance
Medicines and Technologies
Financing

- Absence and shortages of the treating health workers
- Burnout and medical errors.
- Limited staff knowledge and understanding of infection prevention and control (IPC) measures, (PPE)
- Lab staff: poor collection technique

Modi, P., Nair, G., Uppe, A., Modi, J., Tuppekar, B., Gharpure, A., & Langade, D. (2020). COVID-19 awareness among healthcare students and professionals in Mumbai metropolitan region: A questionnaire-based survey.Cureus, 12(4).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- Currently there is no systematic mechanism for collecting or reporting data on patient safety incidents
- There is no system for patient self-reporting of adverse event related to healthcare
- 'Causes of death' data is incomplete and in many incidences, the comorbidities have been listed as an underlying cause of death, rather than suspected
- The lack of robust epidemiological and surveillance mechanisms

Pulla, P. (2020). India is undercounting its COVID-19 deaths. This is how. Science The Wire. https://science.thewire.in/health/india-mccd-comorbidities-covid-19-deaths-undercounting/


Service Delivery
Information
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- Shortages in medical supply
- Quality of the products especially N95 masks
- Lack of enough ventilators, oxygen and ICU medical supplies and poor maintenance of hospital equipment
- Laboratory products
- Hydroxychloroquine and anti-retroviral drugs for prophylaxis

Garg, S., Basu, S., Rustagi, R., & Borle, A. (2020). Primary health care facility preparedness for outpatient service provision during the COVID-19 pandemic in India: Cross-sectional study.JMIR Public Health and Surveillance,6(2),1–7.


Service Delivery
Information
Human Resources
Leadership and Governance
Financing
Medicines and Technologies

- High out of pocket expenditures (OOPE) and poverty
- Pandemic only had a beneficial effect in emergency health services, but not necessarily for strengthening the public health systems in longer term

(The Lancet, 2020)


Service Delivery
Information
Human Resources
Leadership and Governance
Financing
Medicines and Technologies

- Governance capacity and political commitment for investing in health varies across the states
- Sub-optimal coordination and intersectoral engagement

Health Systems Resilience

Service Delivery	Health Workforce	Health Information Systems	Drugs, vaccines and medical technologies	Health Financing	Leadership and governance
					
Maintain quality safe services: during health crisis **More efficient and appropriate services:** by reorganizing service delivery **Service availability and continuity:** including public health program. **People centered care:** based on population needs and epidemiology **Equity in access:** for UHC **Patient and family engagement:** Patient health literacy, web base grievance redressal system, patient groups in policy development.	**Adequate number and rational distribution:** new recruitment, task shifting **Capacity building:** in patient safety and IPC **Skill mix and quality**: for health crisis and patient safety **Properly supported and compensated HWs:** performance-linked payments based on health outcomes. **Additional resource capacity**: community involvement, increasing health-training institutions.	**Integrated information systems:** including National Adverse event reporting and learning system. **Data quality and use for action:** Use of surveillance data for evidence-based decision-making and policies. **eHealth and mHealth**: for preventive and promotive health messages, treatment follow-up, HWs training and continued education	**Sustainability:** Develop incentives for continuous production of essential medicines and equipment **Effective supply chain management:** and the cold chain **Pricing:** uniformity as well as negotiating prices based on economies of scale **Ensuring quality and safety of medicines and medical products:** for substandard and spurious drugs **Rational use of medicines and injectable:** Guidelines availability at all health centers	**More money for health:** increasing Government health spending to 4-5 percent of GDP for UHC **More health for money**: by rational and effective financial resource allocation. **Creation of diverse financial pools:** collaboration with private and philanthropic sectors. **Transparent public financial management systems:** at National and state level	**Regulation for patient Safety and quality assurance:** compliance with NPSIF timelines to improve quality of healthcare and build trust in public **Leadership capacity:** for effective execution of health policies and strategies **Center and State coordination:** for comprehensive patient safety reform **Sector wide collaboration:** Health in all policies and multi sector involvement **Accountability and transparent communication:** making patient safety information available in public domain

Improving Service Delivery, Quality and Safety

- Strengthen health infrastructure for good quality, safe and integrated services
- Re-think and reorganise services
- Improve essential service availability and continuity
- People-centred care
- Equity in access

Building Future Health Workforce

- Adequate number and rational distribution
- Capacity building
- Properly supported and compensated HWs
- Identify additional surge capacity

Integrated Digital Health Information and Surveillance Systems

- Integrated health information systems
- Data quality and use for action
- Scale up eHealth and mHealth

Augment Local Production for Access to Medicines and Medical Products

- Sustainable production of quality essential medicines and diagnostics
- Ensuring safe and appropriate medicines and medical technology
- Rational use of medicines and injectables

Investing in Health: More Money for Health, and More Health for Money

- More money for health
- Transparent public financial management systems

Strengthening Stewardship of Health Sector

- Regulation for patient safety and quality assurance
- Sector wide collaboration
- Transparency and Accountability

tes of anxiety and depression were higher for female healthcare workers and nursing staff.

Brain, Behavior, and Immunity
Volume 88, August 2020, Pages 901-907

Prevalence of depression, anxiety, and insomnia among healthcare workers during the COVID-19 pandemic: A systematic review and meta-analysis

Sofia Pappa [a, b] [1] ✉, Vasiliki Ntella [c, 1], Timoleon Giannakas [c], Vassilis G. Giannakoulis [c], Eleni Papoutsi [c], Paraskevi Katsaounou [c, d]

- At least one in five healthcare professionals report symptoms of depression and anxiety
- Almost four in ten healthcare workers experience sleeping difficulties and/or insomnia.
- Rates of anxiety and depression were higher for female healthcare workers and nursing staff.

- While health workers represent less than 3% of the population in the large majority of countries and less than 2% in almost all low- and middle-income countries, around 14% of COVID-19 cases reported to WHO are among health workers. In some countries, the proportion can be as high as 35%.

WHO:
5 steps to improve health worker safety and patient safety

1. Establish synergies between health worker safety and patient safety policies and strategies:

- Develop linkages between occupational health and safety, patient safety, quality improvement, and infection prevention and control programmes.
- Include health and safety skills in personal and patient safety into education and training programmes for health workers at all levels.
- Incorporate requirements for health worker and patient safety in health care licensing and accreditation standards.

- **2.Develop and implement national programmes for occupational health and safety of health workers:**
- Develop standards, guidelines, and codes of practice on occupational health and safety.
- Strengthen intersectoral collaboration on health worker and patient safety, with appropriate worker and management representation, including gender, diversity and all occupational groups.

- **3. Protect health workers from violence in the workplace**
- Adopt and implement in accordance with national law, relevant policies and mechanisms to prevent and eliminate violence in the health sector.
- Ensure that policies and regulations are implemented effectively to prevent violence and protect health workers.
- Establish relevant implementation mechanisms, such helplines to enable free and confidential reporting and support for any health worker facing violence.

- **4. Improve mental health and psychological well-being**
- Establish policies to ensure appropriate and fair duration of deployments, working hours, rest break and minimizing the administrative burden on health workers.
- Provide access to mental well-being and social support services for health workers, including advice on work-life balance and risk assessment and mitigation.

- **5. Protect health workers from physical and biological hazards**
- Ensure the implementation of minimum patient safety, infection prevention and control, and occupational safety standards in all health care facilities across the health system.
- Ensure availability of personal protective equipment (PPE) at all times
- Ensure adequate training on the appropriate use of PPE and safety precautions.

Evaluation of Patient Safety in COVID-19

Outcome measures

- 1. Hospitalisation rate for COVID-19 (indirect outcome measure of the territory).
- 2. In-hospital Mortality rate of patients hospitalized for COVID-19.
- 3. Average Length of Stay of COVID-19 patients.
- 4. Percentage of COVID-19 patients admitted to ICU.
- 5. In-hospital mortality rate of NO-COVID-19 patients hospitalised for AMI.
- 6. In-hospital mortality rate of NO-COVID-19 patients hospitalized for Stroke.
- 7. In-hospital mortality rate of NO-COVID-19 patients hospitalized for COPD.
- 8. Percentage of NO-COVID-19 hospitalized patients that acquired COVID during the hospitalisation.
- 9. COVID-19 infection rate among staff / Number of tests performed to hospital staff (as process measure).
- 10. Survival rates.

Process measures (some examples)

- 1. Percentage of infected individuals admitted to ICU
- 2. Percentage of people with comorbidities
- 3. Percentage of staff with and without correct equipment
- 4. Number of patients not treated in appropriate level of care
- 5. Percentage staff trained to use equipment

Staff safety measures

- 1. Staff infection rate.
- 2. Staff mortality rate.
- 3. Staff well being.
- 4. Illness and sickness rates.
- 5. Mental illness.

Thank you

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