## Supplementary Table 1. List of categories, themes, codes, based on thematic analysis of physicians’ recommendations for future pandemics.

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| **Analytical Theme** | **Descriptive Theme** | **Code (N=529)** | **Representative Quotes** |
| Uncertainty (6) | • I'm not a public health expert!• Difficult to predict future• No idea |
| Holistic Preparation | Education (30) | Education (6)Education - Politicians (1)Education - Public (5)Education - Medical, Interdisciplinary (1)HCP Training (3)HCP Training - in ICU (1)HCP Training- For Unpredictable Situations (1)Research (10)Research - Funding (1)Research - Training (1) | • Public health education on a continuous basis is fundamental• Public must be constantly educated• Invest in education as early and often as possible• Educating politicians• Train medical students and other health professions to deal with such unpredictable situations • More research on the pandemic |
| Prevention (24) | Prevention (19)Prevention - Prevention > Treatment (1)Vegetarianism (2)Zoonosis - Minimize (2) | • Prevention to build specific structures against pandemics en epidemics infections• Minimize human-animal interactions |
| Proactive Planning (82) | Precaution (2)Learn From Experiences (7)Learn From Mistakes (6)Anticipation (2)Planning (11)Planning - Early (2)Planning - Innovated (1)Preparation (41)Preparation - Proactive (1)Preparation - Alert (3)Preparation - Emergency Planning (3)Preparation - Financial (2)Preparation - Resources (1) | • Maintain the expertise gained by this one• Ensure that any knowledge we gained from the past is applied proactively for future pandemics • Spend more time and resources in the phase of preparedness• Have a better pandemic preparedness strategy, don't wait for 2nd/3rd wave• Now is the time to prepare• Be prepared/expect/learn lessons from this |
| Policy Development and Implementation (13) | Policies (2)Preparation - Policies (2)Policies - Comprehensive, Integrated (1)Policies - Early (2)Policies - Evidence Based (1)Policy - Precaution and Prevention for Future (1)Policy - Update (2)Policy - Masks (1)Policies - Mandate It (1) | • Preparedness and protocols for rapid response • Good, comprehensive, consistent, and integrated policy from the government since the start• Normalize shift in policies with new evidence |
| Execution of Response Measures | Initial Recognition (8) | Acceptance (1)Acceptance - Early (1)Awareness (4)Accountability (1)Accountability - Punishment (1) | • The country responsible for the breakout must take responsibility and admit• Take it seriously earlier• Punish the countries that spread such viruses |
| Guideline Implementation (9) | Guidelines (2)Guidelines - Follow (1)Guidelines - Leniency, Management (Drugs) (1)Guidelines - Social Distancing (1)Guidelines - Standardized Protocols (1)Sanitation (2)Sanitation - Wash Hands (1) | • Have a manual of operation and follow it• Allow MDs to treat patients according to their judgement and do not limit them to strict guidelines• Standard protocol of management• Clear guidelines |
| Response Time (27) | Response - Early Management (4)Response - Proactive (3)Response - Proactive > Reactive (1)Response - Quick Government (1)Response - Quick/Early (15)Response - Rapid, Safe (3) | • Act quickly and definitively • Implement lockdowns and other measures sooner• Quick reaction from government• Be rapid and safe in your response |
| Response Measures (30) | Response - Active, Lockdowns (1)Response - Containment (2)Response - Isolation (3)Response - Lockdown (3)Response - Protective Measures (2)Response - Stronger Quarantine (1)Response - Travel Restrictions (2)Response - Mask Mandates (2)Prioritize Vulnerable (1)Organization (9)Organization - Hospital Wards (2)Organization - Workplace Efficiency (1)Telehealth (1) | • As early as possible closure of the place of origin of infection• Early diagnosing, tracing, and isolating cases• Focus on most vulnerable• Quarantine should be stronger• Work efficiency and better organization• Hospital should reorganize wards and segregate covid positive versus negative to minimize spread of infection |
| Response Development (8) | Response - Coordinated (2)Response - Local Level Decision Making (1)Response - Holistic/Balanced (1)Response - Physician Directed (1)Response - Standardized (2)Response - Innovated (1) | • Allowing physicians to direct it, not government bureaucrats, non-physician practitioners, or politicians• Decision-making at the local and state levels according to the degree of incidence |
| Surveillance (21) | Response - Identification/Detection (2)Response - Investigations (1)Response - Surveillance - Contact Tracing (2)Response - Primary Control (1)Response - Screening (1)Control (2)Control Spread (1)Surveillance (7)Surveillance - Contact Tracing, Testing (2)Surveillance - Containment (2) | • Early detection• Close borders as soon as possible or do more public effort in screening• Surveillance for cases and early institution of control of spread measures• Effective surveillance for rapid response |
| Vaccination (44) | Vaccination (21)Response - Vaccination (1)Vaccination - Accessibility (2)Vaccination - Compliance (2)Vaccination - Herd Immunity (1)Vaccination - Early (1)Vaccination - Education (1)Vaccination - Efficacy, Quantity (1)Vaccination - Elderly (1)Vaccination - Mandate It (4)Vaccination - Manufacturing (2)Vaccination - Distribution (7) | • More access to vaccines There is legal precedent for mandatory vaccination• World achieves herd immunity through vaccination with good distribution• Capacity for local vaccine production• We need effective vaccines in adequate quantity |
| Emotional Wellbeing Response (16)  | Adaptation (4)Morale (3)Morale - Calm (2)Morale - Acceptance (1)Morale - Panic (1)Morale - Realistic (1)Morale - Survival (1)Reflection (3) | • Resumption of activities of daily living in the city in a safe way• Be realistic• Don't panic• Survival Mode• Reflection on our way of life |
| Health System Strengthening | Health System Infrastructure (15) | HS - Advocacy for Patients (1)HS - Adaptation (1)HS - Early Symptom Recognition, Communication and Treatment (1)HS - Funding (1)HS - Infrastructure, Public Welfare, Public Mental Health Programs (2)HS - Leadership/Workforce (1)HS - Infrastructure - Decentralized Planning (1)HS - LMIC Infrastructure (1)HS - One Health Approach (2)HS - Strengthening MOH (1)HS - Transform Care Models (1)HS Strengthening (1)HS Strengthening - Prioritize Healthcare Practitioners (1) | • Decentralized participatory planning on part of government agencies• The One Health Approach. For patients and physicians we should have programs that cover the entire spectrum from physical, psychological, social and spiritual health as a continuum.• Need to develop medical infrastructure in low income countries• Increase resources in public health and onehealth• Healthcare needs to change and adapt |
| Physician Health (4) | Physician Health/Safety (2)Physician Mental Health (2) | • Take care of your doctors• Check on your mental health |
| Interdisciplinary Collaboration (19) | Interdisciplinary Collaboration (11)Coordination (1)Coordination - Government Politics (6)Collaboration (1) | • More coordinated and consistent responses between health care leaders and government leaders• Holistic approach to population wellbeing needs to be considered |
| Not for Profit (5) | Not for Profit (1)Not for Profit - Human Misery (1)Not for Profit - Not Business Oriented (1)Not for Profit - Pharma Companies (1)Not for Profit - Free for All (1) | • Force pharmaceutical companies to stop making profit• Don't profit from human misery and don't be predatory• Science-based leadership above profits |
| Resources (27) | Resources (2)Resources - Free Testing (1)Resources - Hand Hygiene (1)Resources - HS Infrastructure (3)Resources - Human Resources (5)Resources - Masks (3)Resources - PPE Accessibility (1)Resources - PPE (3)Resources - Public Health (1)Resources - Share Supplies (1)Resources - Surveillance, Testing (1)Resources - Screening (1)Resources - Task Force (3)Resources - Prevention (1) | • Share best practices; supplies• Have adequate stock of PPE• Ensure PPE for all healthcare system workers• Creation of expert committees• More resources• Increase resources in public health• Country preparedness from a human resources for health and financial perspective• Improve epidemic control centers• Implement an established task force all year round |
| Transparency (15) | Transparency (12)Transparency - Biopharma (1)Transparency - Leadership (1)Transparency - Trust (1) | • Acknowledgment from all leadership unfront that we are learning as we go and transparency is key• Collective collaboration with transparency• More transparency |
| Appropriate Delegation of Roles | Political Responsibility (3) | Politics - Change Government (1)Politics - Empathy (2) | • A more empathetic political system• Change the government |
| WHO (1) | Role of WHO (1) | WHO is a disgraceful organization, reorganize it. |
| Science vs. Politics (34) | Frontline Opinion (1)Science (5)Science vs. Politics - Agencies (2)Science vs. Politics - Keep Them (“Politics”) Out (12)Science vs. Politics - Epidemiologists (1)Science vs. Politics - Opinions (11)Science vs. Politics - Policy Making (2) | • Strengthening position of clinicians in decision-making, political framing• Less politics, more science• Policymakers should listen more to health professionals• Pay attention to epidemiologists' recommendations |
| Minimize Infodemics | Communication (26) | Communication (4)Communication - Public Awareness (3)Communication - Centralized (1)Communication - public motivation (1)Communication - Science Group (1)Communication - Social Media Misinformation (5)Communication - Avoid Misinformation (1)Communication - Timely (4)Communication - with Public (3)Communication - Inclusive (1)Communication - Spokesperson (1)Communication - Evidence-Based (1) | • Much better and more timely public health communications needed• Improve social communication in order to avoid fake news• Don't let social media to give the information to the public without peer review. The information system must be more open (data access) but is necessary to identify the right communicator• Prevent fake news from spreading, if possible• Better understanding of people's motivation in public health |
| Information (21) | Information (3)Information - Censorship (1)Information - Credibility (4)Information - Media Coverage (2)Information - Relevance (1)Information - Standardized (3)Information - Transparency (2)Information - Availability (1)Information - Sharing (1)Information - Infodemic (1)Misinformation (1)Misinformation - Public (1) | • Availability of true information for action• Consistency of advice from day to day• Less infodemic• Do away with misinformation• Share relevant information• Allow and encourage scientific debates instead of censorship• One central body and not 50 different emails about the same advice from different departments |
| Global Responsibility | Global Equity (9) | Global Equity (9) | • Global initiative to reduce social inequality |
| Collaboration (23) | International Collaboration (19)International Collaboration - Information Sharing (3)International Collaboration - Preparation, Resources (1) | • Better world connection• The world needs to learn to work together |
| Global Action (9) | Planning - Global Health System (2)Response - Standardized Therapy Globally (1)Vaccination - Global (5)Transparency - Global (1) | • Equitable vaccine distribution all over the world• International transparency, China did respond to slowly and did not communicate about severity of situation and did not react to control outbreak |