**Supplementary Table (1): Nursing Staff Perception Regarding Hospital Readiness for Continuity of Essential Health-Care Services in Line with COVID-19. (n = 300)**

| **Hospital Readiness for Continuity of Essential Health-Care Services in Line with COVID-19.** | **Mean ± SD.** |
| --- | --- |
| **Continuity of Essential Health Care Services General Principles** | **3.95 ± 0.60** |
| 1. Communities will continue to experience medical emergencies, such as obstetrical complications, acute heart conditions and life-threatening injuries, which will require hospital care during an epidemic or other emergency.
 | 3.95 ± 0.71 |
| 1. Decisions on how to balance the allocation of scarce hospital resources between routine and emergency needs should be ethical and equitable and should take into account the services that the hospital may be contributing to public health programs.
 | 3.98 ± 0.84 |
| 1. Balancing the routine community healthcare needs against those of epidemic patients should take into account the larger-scale health system response to the epidemic emergency: decisions in this regard should be reached through cooperation between the hospital and local and national health authorities.
 | 4.02 ± 0.82 |
| 1. Delivery of essential services takes precedence over any other consideration, even when the hospital has to be partly or totally evacuated.
 | 3.68 ± 0.85 |
| 1. During an epidemic, the hospital must apply triage criteria with a view to admitting the most critically ill and treatable epidemic patients. In some circumstances, health authorities may require a health facility to focus on providing health services to non- epidemic patients and to refer epidemic patients elsewhere. Exclusion policies may also preclude admission of epidemic patients.
 | 3.94 ± 0.77 |
| 1. In conjunction with health authorities, the hospital should identify the essential services that will be continued, the non-essential services that could be deferred and the criteria for accessing the hospital's services (such as inclusion and exclusion criteria). The criteria will vary according to the severity of the situation, the availability of alternative treatment options (such as community-based care) and the resources available.
 | 3.95 ± 0.74 |
| 1. To mitigate the negative impact of deferring services, a phased approach should be considered.
 | 3.95 ± 0.73 |
| 1. Restricting of the number of admissions of epidemic patients to those who will reasonably benefit from hospital-based care is a complex decision and must be made in coordination with other local health services and the relevant health authority (e.g. Ministry of Health).
 | 4.08 ± 0.76 |
| **Continuity of Essential Health Care Services Basic requirements** | **3.78 ± 0.70** |
| 1. An overall Hospital Emergency Response Plan (and its annexed Epidemic Sub-plan), which is part of the overall Hospital Emergency Risk Management Program and addresses the issue of continuity of essential health services
 | 3.72 ± 0.85 |
| 1. An Incident Command Group to coordinate the hospital's overall emergency response, which includes activities to ensure continuity of essential services, and an operational Hospital Emergency Coordination Centre
 | 3.70 ± 0.77 |
| 1. Policies, procedures and criteria for admitting patients to the hospital during an epidemic.
 | 3.92 ± 0.80 |
| **Continuity of Essential Health Care Services Hospital Preparedness tasks** | **3.89 ± 0.65** |
| 1. Clarify with the Ministry of Health the hospital’s role in an epidemic emergency, in particular whether it should admit epidemic patients or refer them to another hospital.
 | 3.90 ± 0.77 |
| 1. Establish mechanisms for facilitating mutual support and coordination between hospitals and local healthcare providers to prevent or mitigate hospital overload by the use of referral/counter-referral systems, patient follow-up at alternative care sites and home care (for patients not requiring admission to hospital).
 | 3.85 ± 0.79 |
| 1. Determine whether and to what extent mutual aid agreements and synergies with other healthcare facilities, the Ministry of Health, private sector agencies, universities and other organizations could make available additional personnel required within and outside the hospital in order to maintain uninterrupted essential hospital services.
 | 3.76 ± 0.80 |
| 1. Formulate strategies for referring epidemic patients to healthcare facilities at other health system levels.
 | 3.98 ± 0.79 |
| 1. Identify, in consultation with the Ministry of Health, the essential routine services to be maintained during an epidemic, and allocate human and material resources accordingly.
 | 3.94 ± 0.74 |
| 1. Determine procedures for management of non-essential services, including referral to other facilities or levels of care, or deferral until a decision is taken to resume non- essential services.
 | 3.86 ± 0.67 |
| 1. Estimate the number of epidemic patients the hospital can admit without jeopardizing its ability to ensure continuity of essential services to non-epidemic patients and inform health authorities and other community officials of this estimated number.
 | 3.86 ± 0.77 |
| 1. Identify all the services provided by the hospital, both in- and outpatient, as well as services provided to public health programs.
 | 3.94 ± 0.70 |
| 1. Identify the public health programs supported by the hospital and develop plans to ensure continuity of this support in the context of the hospital's emergency role in an epidemic.
 | 3.95 ± 0.69 |
| 1. Ensure that the hospital’s Epidemic Sub-Plan includes strategies for ensuring continuity of essential services for non-epidemic patients and, at the same time, delivery of medical care needed by epidemic patients.
 | 3.89 ± 0.80 |
| 1. Ensure that the hospital’s Epidemic Sub-plan includes arrangements for the acquisition, resupply and availability of equipment, supplies and other material resources needed to ensure continuity of essential services.
 | 3.91 ± 0.77 |
| 1. Determine what categories of personnel, in what numbers and with what competencies, are likely to be required to ensure continuity of essential services.
 | 3.92 ± 0.79 |
| 1. Ensure that the Hospital Emergency Response Plan (including the Epidemic Sub-plan) includes arrangements to obtain qualified staff (such as by recruiting volunteers, nursing or medical students, or retired staff) to ensure continuity of routine essential services when the demands of the epidemic emergency are causing serious staff shortages.
 | 3.81 ± 0.90 |
| 1. Establish mutual aid agreements and memoranda of understanding with the various private- and public-sector healthcare facilities participating in the local hospital network with a view to making a coordinated effort to maintain essential healthcare services and to strengthen the hospital’s capacity to provide continuity of essential services to the community.
 | 3.86 ± 0.75 |
| **Continuity of Essential Health Care Services Hospital Response tasks** | **3.91 ± 0.68** |
| 1. Ensure that mechanisms are in place to receive response operational directions from, and to coordinate actions with, the Incident Command Group.
 | 3.71 ± 0.72 |
| 1. Assess staffing needs to ensure continuity of essential services during the emergency and work with the human resource department to secure additional staff as required.
 | 3.79 ± 1.04 |
| 1. Determine the critical care needs (intensive care, antibiotic therapy, etc.) of the most severely ill epidemic patients.
 | 4.06 ± 0.77 |
| 1. Review the hospital’s plans for ensuring continuity of selected essential services and revise them to meet the specific circumstances of the current epidemic.
 | 3.97 ± 0.72 |
| 1. Adapt the hospital’s role in supporting public health programs to the specific characteristics of the current emergency situation.
 | 3.84 ± 0.76 |
| 1. Ensure continuous monitoring of the capacity of the hospital to provide the agreed essential healthcare services required by non-epidemic patients and keep the relevant health authorities informed of the extent to which the hospital is succeeding in this task.
 | 3.93 ± 0.73 |
| 1. Ensure that enough medicines, supplies and staff are available to meet the specific needs of epidemic patients and also the needs of non-epidemic patients.
 | 3.90 ± 0.93 |
| 1. In order to reduce the risk of epidemic transmission in the hospital, organize patient traffic flow to avoid contact between patients requiring routine essential care and those affected by the epidemic.
 | 4.06 ± 0.75 |
| **Continuity of Essential Health Care Services Hospital Recovery task** | **3.74 ± 0.68** |
| 1. As part of an overall hospital review, assess the hospital's operational performance in implementing emergency plans to ensure continuity of essential routine services and, if necessary, update these plans on the basis of lessons learned.
 | **3.74 ± 0.68** |
| **Overall** | **3.89 ± 0.61** |

**Nursing Staff Perception Regarding Hospital Readiness for Continuity of Essential Health-Care Services in Line with COVID-19.**

Supplementary Table 1 revealed a moderate mean score of nursing staff’ perception regarding hospital readiness for continuity of health-care services (3.89±0.61). The highest mean score was associated with the hospital readiness regarding general principles of continuity of health care services (3.95±0.60) followed by response tasks (3.91±0.68). Whereas the hospital readiness regarding recovery tasks of continuity of health care services (3.74±0.68) has the lowest score among these dimensions.

**Supplementary Table (2): Nursing Staff Perception of Surge Capacity in Healthcare in Line with COVID-19. (n = 300)**

| **Hospital Readiness for Surge capacity in Healthcare in Line with COVID-19.** | **Mean ± SD.** |
| --- | --- |
| **Surge Capacity General principles** | **3.86 ± 0.75** |
| 1. the ability of a hospital to meet an increased demand for health services—is a cornerstone of the overall approach to managing health emergencies. It has implications for the functioning of the entire hospital.
 | 3.86 ± 0.75 |
| **Surge Capacity Basic requirements** | **3.85 ± 0.67** |
| 1. An Incident Command Group to coordinate the hospital's overall emergency response, which includes activities required to ensure surge capacity, and an operational Hospital Emergency Coordination Centre.
 | 3.77 ± 0.71 |
| 1. Health system strategies for optimizing the utilization, at all healthcare levels, of the resources needed to cope with epidemics and other emergencies.
 | 3.92 ± 0.73 |
| **Surge Capacity Hospital Preparedness tasks** | **3.83 ± 0.65** |
| 1. Establish mechanisms for facilitating mutual support and coordination between hospitals and local healthcare providers to prevent or mitigate hospital overload by the use of referral/counter-referral systems, patient follow-up at alternative care sites and home care (for patients not requiring admission to hospital)
 | 3.84 ± 0.73 |
| 1. Ensure that staff receive training and participate in regular exercises in order to enhance their ability to fulfil their roles in contributing to the hospital's surge capacity.
 | 3.85 ± 0.83 |
| 1. Make or update an inventory of all available resources:
* organizational (public and private; primary, secondary and tertiary levels of care);
* physical (healthcare establishments, equipment);
* human (staff);
* material (supplies).
 | 3.75 ± 0.74 |
| 1. Develop strategies and emergency response plans to provide surge capacity in an epidemic or other emergency for:
* human resources;
* staffed beds, including intensive care beds;
* critical equipment, supplies and other resources, including extra quantities of personal protective equipment, vaccines, antiviral medications, medical supplies and ventilators.
 | 3.89 ± 0.76 |
| 1. Develop strategies for expanding hospital areas and ward and bed capacity (such as using stretchers in new spaces or converting ward beds into emergency beds) and estimate the additional staff, supplies and related costs incurred by these surge measures.
 | 3.85 ± 0.82 |
| 1. Make agreements with suppliers to ensure that the hospital receives the necessary supplies and resources early enough and in sufficient quantities to ensure the hospital’s self-reliance during the acute phase of an epidemic.
 | 3.81 ± 0.83 |
| 1. Determine whether and to what extent mutual aid agreements and synergies with other healthcare facilities, the Ministry of Health, private sector agencies, universities and other organizations could make available additional personnel required within and outside the hospital in order to achieve surge capacity.
 | 3.74 ± 0.66 |
| 1. Establish mechanisms for facilitating mutual support and coordination between hospitals and local healthcare providers to prevent or mitigate hospital overload by the use of referral/counter-referral systems, patient follow-up at alternative care sites and home care (for patients not requiring admission to hospital).
 | 3.86 ± 0.68 |
| **Surge Capacity Hospital Response tasks** | **3.84 ± 0.68** |
| 1. Adapt the Hospital Emergency Response Plan (and the Epidemic Sub-plan), including the surge capacity components, and develop a surge capacity Action Plan which is tailored to the characteristics of the emergency, as determined by epidemic event risk assessments and evolving situational and needs assessments.
 | 3.83 ± 0.63 |
| 1. Recruit extra staff, expanding recruitment sources to include volunteers, retirees, medical students, and so on, and arrange for appropriate credentialing and training.
 | 3.56 ± 0.98 |
| 1. Update the inventory of hospital resources needed to meet the increased demand for services created by the emergency.
 | 3.82 ± 0.84 |
| 1. Increase the number of staffed hospital beds and other in-patient resources.
 | 3.75 ± 0.91 |
| 1. Adapt admission strategies to include utilization, as needed, of day-care areas, observation rooms and infection stabilization wards.
 | 3.91 ± 0.80 |
| 1. Develop and implement policies for early patient discharge.
 | 3.95 ± 0.79 |
| 1. Reorganize and adapt triage criteria to release additional capacity and contain hospital overload, referring epidemic patients, if need be, to other potential providers, such as public health programs, alternative care sites or home care for patients not requiring in-patient services.
 | 3.91 ± 0.79 |
| 1. Implement communication strategies, such as hotlines, for hospital staff and other health care workers and the community.
 | 3.97 ± 0.76 |
| **Surge Capacity Hospital Recovery task** | **3.79 ± 0.75** |
| 1. As part of an overall hospital review, assess the hospital's operational performance in providing a surge capacity and, if necessary, update these plans on the basis of lessons learned.
 | 3.79 ± 0.75 |
| **Overall** | **3.83 ± 0.63** |

**Nursing Staff Perception Surge Capacity in Healthcare in Line with COVID-19**

Supplementary Table 2 shows the average mean value of nursing staff’ perception regarding surge capacity as 3.83±0.63. The highest mean score was related to the hospital ability to manage surge capacity general principles (3.86±0.70), followed by surge capacity basic requirements (3.85±0.67). Whereas the lowest mean score was related to the hospital ability to manage recovery tasks of surge capacity (3.79±0.75).