Lessons Learned from the Past Pandemic
Concept Note on Proposed Reforms of Care Pathways

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Introduction

Like many other countries, Sri Lanka faced the challenges posed by the COVID-19 pandemic and also it gave an opportunity to identify gaps in country’s health system and initiate to make more efficient, resilient interventions to cope with the crisis while maintaining routine care. It especially highlighted the importance of organizing integrated care pathways while managing huge influx of cases in the third wave but also in other waves where mostly with asymptomatic patients.

Background

Contribution of PHC during COVID pandemic

Primary Health Care facilities, being the first point of contact for most individuals, play a crucial role in identifying and addressing potential COVID-19 cases promptly [¹].

PHC facilitates community engagement and education. During the pandemic, effective communication with communities regarding preventive measures, testing protocols, and vaccination campaigns became imperative. Strengthening PHC ensures that communities are well-informed and can actively participate in their own health [²].

By reinforcing PHC, the burden on secondary and tertiary hospitals can be alleviated. Primary healthcare centres can handle a significant portion of routine healthcare needs and minor illnesses, reducing the strain on higher-level facilities, which can then focus on more severe cases, including complicated COVID-19 patients.

Strengthening PHC enhances the overall resilience and preparedness of the healthcare system. Primary healthcare facilities serve as the backbone of a robust healthcare infrastructure, ensuring that the system is better equipped to respond to health crises promptly and efficiently.

Strengthening primary healthcare promotes and ensures that equitable access to healthcare services to all, including vulnerable and marginalized populations who may face barriers to accessing higher-level healthcare facilities.

PHC supports continuity of care, particularly for individuals with chronic conditions. Strengthening primary healthcare ensures that individuals with ongoing health needs receive consistent and uninterrupted care, even during a pandemic. Primary healthcare embraces a holistic approach to health, addressing not only infectious diseases but also chronic conditions, mental health, and preventive care. This comprehensive approach is vital for overall community well-being [¹].

Success in measures with integrated PHC during pandemic management

The country implemented various measures either preventive or curative
aspects specially through Primary Health Care. Initially implemented measures were focused to curtail the spread of the virus, including lockdowns, travel restrictions, and social distancing hygienic protocols \cite{3,4} later immunization campaign activities through primary health care which was aimed to protect the population against the virus.

Further, PHC institutions helped to accommodate patients; asymptomatic patients in second wave and mild and moderately affected patients even with simple Oxygen therapy in the third delta wave. PHC institutions were eased to manage huge patient load to Secondary care and Tertiary Care through the step down hospital concept in addition to Home Based Care managed patients while being with the comfort at their homes but monitored by medical staff twice a day through the established call centre and hotline 1390. It provided a direct access for citizens with COVID-19 symptoms to seek advice and guidance as well as monitoring their health condition \cite{5}.

These innovative approaches introduced during the COVID 19 pandemic such as decentralization of follow-up, mobile NCD follow up clinics, Home Based Care, introduction of Telemedicine, Community based care mechanism with home visit, step down with underutilized PHC institutions, more involvement of general practitioners and domiciliary health workers etc. As well as strengthening Primary Health Care are seemed to be still applicable and valid for any crisis situation.

**Current care pathway**

The health system in Sri Lanka is characterized by two main arms: the public sector and the private sector. The public sector plays a significant role in providing both preventive and curative care. The curative sector within the public system consists of different levels of care, ranging from primary to tertiary care facilities providing curative and rehabilitative care. Patients in Sri Lanka have the liberty to choose their healthcare provider \cite{6}. However, there is a trend where patients often opt for secondary and tertiary level hospitals. The preference for Secondary and Tertiary Care hospitals leads to overcrowding in these facilities. This overcrowding is driven by factors such as the perceived availability of consultants, a broader range of drugs, and advanced medical facilities at these higher-level institutions \cite{7}.

Meanwhile, Primary Care level health facilities are underutilized, despite their role in providing essential and foundational healthcare services. This underutilization is partly due to the aforementioned patient preferences and the perceived inadequacy of services at the primary level. There is a lack of proper communication and referral systems between higher-level healthcare institutions (Secondary and Tertiary Care hospitals) and Primary Health Care level institutions. This isolation in functioning of these care levels contributes to mal-incorporation in the patient care pathway, hindering seamless transfers between different levels of care even without informing the higher Centre.

The absence of a proper referral - back referral mechanism exacerbates the incoherent nature of the healthcare pathway \cite{7}. Patients often face challenges when transitioning back to primary care after receiving treatment at higher-level facilities. There is a recognized lack of caregiver development and community-based care initiatives. Strengthening these aspects could enhance the overall
healthcare delivery system, ensuring that patients receive comprehensive care within their communities.

**Gaps and solutions identified through pandemic experience**

In light of experience in various emergency and disaster situations especially in pandemic, following hinders in patient care management were identified and some solutions have been proposed based on pandemic experience.

- Step down Hospital concept, Family Clinic for follow up, Home based care with
- Enhancing utilization of Primary Care Institutions- through availability of specialist service through visiting or Telemedicine
- Improving efficiency of attending emergency – Developing Primary Care institutions as first contact centre in emergency
- Developing care pathways with referral and back referral mechanism
- Improving quality of patient care - Caregiver development, community-based care

It was suggested to plan for revitalization of PHC system with a focus on efficient cost-effective service with better access to quality health care (Universal Health Coverage), and more rational and efficient use of existing services and suggested following strategies

- Resource sharing as cluster hospitals with an empanelled population
- Delivering essential Health Care Service as a defined package
- Integrated care pathways with well-defined referral and back referral system
- Improved Emergency care through well-equipped ETU (Level IV A&Es) and well trained Medical Officers and Nursing Officers which are clustered linking with Apex Hospital through Telemedicine
- Improved follow up care through established network of Family Clinics in PHC institutions and Apex hospital with empanelled population who are screened through Healthy Life Clinics
- Most importantly specialist service through physically attending visiting Specialist Service or at least through Telemedicine /Tele Health

PHC strengthening will be a more sustainable solution even for current and future crisis with above as well as with Step Down Hospitals for elderly patients and patients on rehabilitative care connecting with home-based care and Community Based Rehabilitation as a centre which links through Family Clinics. Preparedness for disasters and community empowerment also including community based Mental Health programme will enhance the ability and capacity to cope up the demand in a sudden surge; balancing supply and demands in services and resources.

**Proposed care pathway: Step-Down Mechanism for Transitioning especially elderly patients and patients on rehabilitative care to Primary Health Care**

In the South Asian context, Sri Lanka stands out with 12.3% of its population aged 60 or older, marking the highest proportion in the region. This demographic reality brings to the forefront the imperative for well-structured and holistic care systems to address the unique needs and challenges faced by the elderly (8).
Geriatric care management recognizes the multidimensional nature of elderly care, encompassing medical, social, emotional, and logistical aspects [9]. Similarly, disability care has become an integral facet of support services tailored to enhance the autonomy of individuals living with disabilities.

As the above, country identifies the need for development and implementation of effective comprehensive geriatric and disability care system with collaborative efforts from governments, healthcare professionals, and society at large, it is supposed to be achieved through designing a step-down mechanism to transition geriatric and disabled patients from tertiary and secondary level hospitals to primary health care institutions.

This step dawn initiative marks substantial progress in recognizing and addressing especially the needs of the elderly patients and patients on rehabilitative care. It is acknowledged that the emphasis on elderly and disability / rehabilitative care has been primarily limited to secondary/tertiary-level hospitals and predominantly within the curative sector. Moving forward, there may be opportunities to expand the scope of geriatric care to primary healthcare settings and to incorporate preventive and community-based approaches to enhance the overall well-being of the elderly population in Sri Lanka.

The subsequent step involves the establishment of a step-down hospital mechanism designed to transition the care of geriatric and disability patients from secondary/tertiary care settings to primary care institutions. This strategic move aims to enhance the utilization of primary care facilities and improve patient satisfaction and quality of patient care while concurrently alleviating the workload burden on secondary/tertiary care hospitals. The envisioned outcome is a more integrated and efficient healthcare system, fostering improved patient outcomes and streamlined resource allocation across various levels of care.

By systematically implementing this step-down mechanism, it facilitates more efficient and patient-centred transition of elderly patients and patients on rehabilitative care from higher-level hospitals to their homes through primary health care institutions as a transit centre. It is essential to develop Medical officers and nursing officers in primary health care institutions by consultants in higher-level hospitals as a part of their team and linking with tele-consultation and telemedicine. Referring and back referring will enhance the quality and effectiveness of patient care when necessary. Below is a comprehensive plan outlining the key steps and considerations for implementing such a mechanism:

1. Training and educating of primary healthcare providers

Train primary health care providers on the specific needs of elderly and rehabilitative patients being transferred. It is needing to provide educational resources and materials as well as protocols and guidelines to support the transition.

2. Identification of suitable Patients:

Identification of elderly and disabled patients suitable for step-down care is needed based on developed criteria on each patient's medical condition, social support, and rehabilitation needs ideally by a multidisciplinary team of healthcare professionals consisting of physicians,
nurses, physical therapists, social workers, and case managers.

3. Care Plan Development:
Sharing the individualized care plan developed by the multidisciplinary team is necessary with the primary health care team.

4. Communication and Coordination:
Need to establish clear communication channels between tertiary/secondary hospitals and primary health care institutions and coordination through a designated coordinating officer responsible for liaising between the hospitals and ensuring a smooth transition.

5. Facility Readiness:
Ensure that primary health care institutions have the necessary facilities with infrastructure, equipment and trained staff to meet the unique needs of elderly and rehabilitative as well as a specialized transport services equipped to handle the needs.

6. Reception at Primary Health Care Institutions and Continuous Monitoring and Assessment following discharge
Prepare primary health care institutions to receive and accommodate the transferred patients by a train staff and to provide specialized care based on the individualized care plans. Then, it is essential to develop a mechanism for continuous monitoring and assessment of patients on post-transition period based on scheduled follow-up appointments with primary health care providers soon after the transfer.

7. Caregiver Support:
Provide support and resources for caregivers to ensure they can effectively care for patients at the primary health care level. It is essential to offer training programs and access to community support services for patients and caregivers. This training program aims to empower house members with the knowledge and skills necessary to contribute effectively to the overall care ecosystem. The goal of this house member training initiative is to create a supportive network within households, ensuring that elderly and disabled individuals receive holistic care that extends beyond formal healthcare settings. By equipping house members with the necessary knowledge and skills, the healthcare system becomes more inclusive and capable of addressing the diverse needs of individuals across different care settings.

8. Quality Assurance and Improvement:
Implement a system for quality assurance and continuous improvement.

Conduct regular reviews and solicit feedback from healthcare providers, patients, and caregivers to enhance the step-down mechanism. Use feedback information from established feedback mechanism from patients and their families to provide input on their experience in order to continuously improve the transition process.

9. Community Engagement in Home Based Care / Community Based Rehabilitation
Engage with local communities to raise awareness about the step-down mechanism and encourage community participation in supporting the care of geriatric and disabled individuals. The subsequent phase of this comprehensive healthcare initiative involves the imperative task of training house members in the nuances of geriatric and disability care. Recognizing the pivotal
role that households play in the support and well-being of individuals requiring such specialized care.

**Conclusions**

Even opening of all hospitals which were dedicated on normal patient care for COVID patient management compromising normal patient care in order to cope up the huge influx of patients and severity of complications reported, adopted strategies in order to release the burden to main hospitals and to spare main hospital beds for more critical patients seem to be still suitable to be continued for cost effective patient care management.

The lessons learned from the COVID-19 pandemic have provided valuable insights into the strengths and weaknesses of Sri Lanka's healthcare system. The challenges faced during this global health crisis have prompted a re-evaluation of the existing care pathways and have highlighted the importance of reinforcing Primary Health Care (PHC) as a cornerstone of the country's health infrastructure.

Identified gaps, such as overcrowding in secondary and tertiary care centres, underutilization of primary care institutions, and the need for efficient emergency care, have led to proposed solutions. These solutions include the step-down hospital concept, family clinics for follow-up, home-based care, and improved emergency care through well-equipped primary care institutions.

The proposed strategies for revitalizing the PHC system involve resource sharing, delivering essential healthcare services as a defined package, integrated care pathways, improved emergency care, and enhanced follow-up care through established networks of family clinics. Specialist services, whether through physical attendance or telemedicine, are also highlighted as crucial components.

**References**