



Putting community-based palliative care into practice through primary health care: policy, education and service delivery considerations for Sri Lanka

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Abstract

Introduction: Palliative care services must be expanded in all settings, most notably at the primary health care level. **Objective:** This paper aimed to stimulate a discussion on how to promote the deployment of community-based palliative care services that address the holistic palliative care needs of the people through primary health care in Sri Lanka. **Methods:** A literature search was conducted using key databases using search terms concerning palliative care and primary health care. In addition, government and international websites were searched to identify reports, guidelines, policy documents, and global and country-specific reports on palliative care in the primary healthcare context. Articles and documents produced in English and Sinhala from the year 2000 onward were collected, analyzed, and presented narratively. **Results:** Following its recognition by National Health Policy 2016-2025, several others (National Strategic Framework for Palliative Care Development, National Multisectoral Action Plan for the Prevention and Control of Non-Communicable Diseases, National Elderly Health Policy, National Strategic Plan on Prevention and Control of Cancer, Primary care policy, HIV/AIDS policy, Mental Health Policy, etc.) had identified palliative care as a priority area. National Cancer Control Programme has conducted various training and refresher programs, developed publications and training materials, and supportive guidelines and circulars on Palliative Care

targeting different categories of primary health care workers. The Palliative Care and End of Life Care Taskforce and the College of Palliative Medicine of Sri Lanka have also developed several publications. Limited home-based palliative care is delivered at present through Public Health Nursing Officers. Primary preventive health services involvement in palliative care provision at present was negligible. Conclusion: Despite many positive factors, there is still much to improve in policy, education, and service delivery on palliative care. By incorporating both primary palliative care and public health palliative care strategies in primary care, Sri Lanka has the potential to greatly improve community-based palliative care.

Keywords: Community-based care. Palliative care. Primary health care. Sri Lanka.

Introduction

Accessing palliative care is a significant issue everywhere in the world. Roughly three million of the 40 million individuals who require palliative care each year can access such services [1,2]. According to a 2019 global study by the World Health Organization (WHO) about noncommunicable diseases, funding for palliative care existed in 68% of the countries, out of which only 40% stated that the services reached only 50% of the patients needing palliative care [3]. The situation is more dire for low- and middle-income countries.

According to the literature, 76% of adults in need of palliative care live in low- and middle-income countries, and over 64% of adults in need of palliative care are found in the Western Pacific, Africa, and Southeast Asia regions. Additionally, 98% of children [aged 0 to 19 years] who require palliative care reside in low- and middle-income countries. Over half of children who require palliative care are from the African continent, with Southeast Asia coming in second place 20% [4].

Similarly, the need for improved, accessible, and equitable palliative care services is increasing in Sri Lanka. It is estimated that approximately 68,000 persons, or 60% of all deaths, require palliative care each year in Sri Lanka [5]. Although considerable advancements in medicine and society at large are reflected in the aging of the population [6], increasing life expectancy poses significant healthcare challenges [7]. Therefore, there is an urgent need to expand service capacity and train the workforce since more individuals are living longer with serious chronic illness, multimorbidity, and functional impairment [7].

Primary health care has long been identified as a cornerstone in achieving universal health coverage [8]. Even though, it is important to improve palliative care services at all levels of care, for countries with low resources improving palliative care at all levels can be challenging. To overcome such barriers the World Health Organization suggests including palliative care development as an integrated component of overall health systems strengthening and monitoring through a primary health care approach [9]. Primary health care has a high potential for providing excellent palliative care to patients, particularly community-based palliative care. The integration of several primary care fields and community-oriented primary care is vital for the delivery of quality palliative care [10].

Delivery of Community-Based Palliative Care

The delivery of palliative care outside of hospitals and outpatient clinics is referred to as community-based palliative care [11]. Home, nursing homes, day programs, volunteer organizations, and support groups are some examples of these contexts. There is compelling evidence that community-based palliative care can lower hospital expenses and admissions at the end of life [11]. Global literature reveals several initiatives to integrate services to provide patients and their families with seamless care.

Since the 1960s, the hospice movement has had a significant impact on the provision of end-of-life care. Since the development of palliative care, most hospices in developed countries have prioritized the provision of community-based services [12]. In the context of the

United Kingdom about 60%-75% of total community palliative care services are delivered by hospice organizations [13].

Primary palliative care is another well-known approach. In countries with a solid primary health care system, primary care provides a majority of palliative care to patients in their final year of life. The incorporation of palliative care into primary care practice ensures that those in need receive quality care that is more customized to the patient's preferences [14]. Healthcare professionals may receive training in primary palliative care through self-directed learning, shadowing, non-fellowship training programs, or other methods. The objective of such care teams is to enhance the quality of life of patients and their carers through a range of services, such as symptom management, counseling, arranging psychological support and social assistance, and discussions about the goals of care with the patient and caregivers [11].

Abel et al. (2018) promote the public health approach or health-promotive approach to palliative care as "the new essentials model" to reshape services by coordinating specialist palliative care, generalist palliative care, compassionate communities, and the civic approach to end-of-life care [15]. The Ottawa Charter for Health Promotion, which guides public health palliative care, respects communities' capacity to identify needs and strengths, determine priorities, and formulate goals and strategies [16]. The Neighbourhood Network Schemes of Kerala [17] is the best regional example of such a model.

As hospice-led community-based palliative care doesn't involve primary health care, and the article aims to see the involvement of primary health care, this article will only consider the integration of primary palliative care and public health palliative care models. This study aimed to stimulate a discussion on how to promote a paradigm shift towards the deployment of community-based palliative care services that address the holistic palliative care needs of the people through integration with primary health care in Sri Lanka.

Methods

A literature search was conducted using databases ('Google Scholar', 'CINAHL,' and 'MEDLINE) using the terms, "palliative care," "end-of-life care," "terminal care," "supportive care," "community-based care," and "primary health care" within their title, abstract or keywords. In addition, the following websites were searched: World Health Organization, National Cancer Control Programme, Ministry of Health Sri Lanka, Directorate of Non-Communicable Diseases (NCD), Sri Lanka, Ministry of Health Sri Lanka, World Wide Hospice

and Palliative Care Alliance, The Institute for Health Metrics and Evaluation, and the Association for Palliative Medicine of Great Britain and Ireland. The inclusion criteria covered peer-reviewed articles, book chapters, reports and guidelines, policy documents, and global and country-specific reports produced in English and Sinhala from the year 2000. Articles written in languages other than English or Sinhala, before 2000 or not involving palliative care were excluded. Data were analysed and presented narratively under the key categories; policy and advocacy, education and training and service delivery.

Results

Policy and Advocacy

Palliative care has been identified in the 'Sri Lanka National Health Policy 2016-2025' under the broad strategic direction of 'Promotion of equal access to quality rehabilitation care' [18]. The National Steering Committee for Palliative Care Services was established in 2012. It is conducted under the chairmanship of the Director General of Health Services and represents different fields of palliative care including health, non-health, and community-based organizations and non-government organizations to address key issues and assess the progress of capacity building, availability of medicine, training, and capacity building and service delivery in palliative care.

The National Strategic Framework for Palliative Care Development 2019-2023 describes integrating palliative care into all levels of health care including primary health care and community-based care. Key activities described under this strategy involve; "Integrate palliative care at primary care institutions & general practitioners", "Conduct programs on home-based palliative care including involvement of primary care institutions & general practitioners and scale up" and "Ensure the role of Public Health Nursing Officer (PHNO) in palliative care at home based setting" [7]. However, it does not mention any initiatives taken at the community level or at the primary care level to achieve these key strategies.

The National Strategic Plan for the Development of Cancer Prevention and Control 2020-2024 made a notable improvement by including activities to involve primary care and the community for palliative care. These activities include; developing multi-disciplinary teams at each health service level including primary and community levels, advocacy for including palliative care at the community and primary care level, establishing support groups among cancer survivors and well-wishers, maintaining linkage with general practitioners association and provision of home-based care, etc. [19].

However, despite the activities targeted to achieve the broader strategy of improving palliative care access in primary care, the "access" has been confined to active clinical service provision with less observation and assessment of the community. Similarly, there's very little involvement by public health teams.

Moreover, there are no activities to link the non-health sector and primary care which is crucial given the nature of palliative care. Following its recognition as a part of the mainstream health system in the National Health Master Plan 2016-2025, several other policies of the Ministry of Health incorporated palliative care as a priority area within their service provision. However, these policy and strategy documents on palliative care development [20-22], lack action plans or timeframes for action for the integration into primary health care or the community.

Education and Training

Training on palliative care

During recent years the Palliative Care Unit, National Cancer Control Programme has conducted various physical and virtual training programmes on Palliative Care targeting different categories of primary health care workers. This involved both the curative and preventive health sectors [23,24]. The aim has been to sensitize primary health care staff on the principles of palliative care and refresh skills in communication, symptom management, and psychosocial care. In addition to health care workers, the program has conducted training for Community-Based Organizations like the "Sarvodaya Shramadana Movement" and Non-government (commercial) caregiver organizations on the concept of palliative care as well as informal caregiver training. Collaboration with civil society organizations to improve accountability and quality services was a key recommendation of the impACT review 2019 [25]. In addition to the National Cancer Control Programme, the College of Palliative Medicine of Sri Lanka and the Provincial Director of Health Services, Western Province have been conducting informal caregiver training for primary care workers.

Publications

There have been several publications for primary health care workers "Palliative Care for Cancer Patients in Primary Health Care-2022"; "Caregiver Training of Trainer module book -Sinhala &Tamil-2021" and informal caregivers "Diviyata Sanasumak Caregiver booklet – Sinhala& Tamil- 2021"; "Caregiver booklet: Childhood cancer patients 2021" developed by the Palliative Care Unit, National Cancer Control Programme aiming to improve knowledge on patient management

at primary care settings and to improve capacity of informal caregivers [26]. Moreover, to improve communication and continuity of services at all levels of care the National Cancer Control Programme introduced the Shared Care Clinic Record (H -1314) in 2021 [24]. In addition to the National Cancer Control Programme, the Palliative and End of Life Care Task Force, of the Sri Lanka Medical Association has developed several publications on palliative care for Medical Officers. However, these publications are more clinically oriented and therefore provide little practical support for other primary health care workers.

In 2022, the College of Palliative Medicine of Sri Lanka together with the Ministry of Health developed an information booklet "Touch of tender loving care: A Guide to develop palliative care in a home setting for primary caregivers". This publication was aimed at primary health care workers to use as a health information tool to spread the message on palliative care to the community.

Service Delivery

A lack of awareness regarding palliative care, as well as the lack of availability and accessibility of resources, results in significant suffering, and poor quality of life for people at the end of life [27]. Community-based palliative care models that have been successfully developed and established allow for care to be provided in patients' homes. This will ensure that holistic care is provided while taking social, cultural, and economic factors into account. Expanding the network of home-based care with trained multidisciplinary teams can improve palliative care delivery.

The "Proposed Model for Delivery of Palliative Care" illustrated in the National Strategic Framework for Palliative Care Development in Sri Lanka 2019-2023 involves both preventive and curative health sectors at the community level with stronger links between the sectors [7]. Though the links have been there in theory there has not been much progress in practice over the years.

Currently, the Ministry of Health with the financial assistance of the World Bank and the Asian Development Bank is conducting a Primary Health Care reorganization to improve the capacity of the primary care system to provide comprehensive care, to face the changing burden of non-communicable diseases and potential health emergencies [28]. The project targets both preventive and curative primary care with the hope of improving elderly care, mental health, non-communicable diseases, rehabilitation, and disability care services.

With the influence of the above project and technical guidance of the National Cancer Control Programme, home-based palliative care services at the primary care level have been successfully initiated by a handful of Primary Medical Care Units with the help of Public Health Nursing Officers. Several issues have hindered its expansion. The severe shortage of Public Health Nursing Officers at Primary Medical Care Units in the country and the workload due to other NCD-related activities have greatly affected their engagement in community-based care [29]. Therefore, home-based palliative care services have not been able to meet the growing demand. Without having adequate staff to carry out the envisioned services it is impossible to achieve successful home-based palliative care in primary care.

Essential Medicine and Services

A major goal of palliative care is to provide comfort and to improve the quality of life of patients diagnosed with a life-limiting illness [30]. Pain is one of the common treatable symptoms in patients with advanced disease. Ensuring continuous supply of morphine for palliative patients was highlighted and recommended at the National Steering Committee meeting on Palliative Care held on 31.08.2020, as well as by the General circular no 01-14/2015 on "Prescribing and Issuing of Morphine for Cancer Pain Management. The National Cancer Control Programme has developed a draft guideline on "Delivering an uninterrupted supply of morphine for palliative patients at home" with input from the Sri Lanka College of Oncologists, the College of Anesthesiologists and Intensivists of Sri Lanka, and the Ceylon College of Physicians to overcome the gaps in providing patients with an uninterrupted supply of morphine at home.

Palliative oxygen therapy has been provided for patients with cancer or end-stage cardiorespiratory disease, who are still experiencing intractable breathlessness [31]. The Palliative Care Unit of the National Cancer Control Programme developed a circular on "Establish a standardized mechanism to provide home oxygen for patients with hypoxia", with the expertise of the Sri Lanka College of Pulmonologists, Sri Lanka College of Oncologists, Ceylon College of Physicians and the College of Anesthesiologists and Intensivists of Sri Lanka as a recommendation of the National Steering Committee on Palliative Care, to provide home oxygen for needy patients using underutilized oxygen concentrators purchased during the COVID-19 pandemic [32].

Discussion

Every individual is destined to die. However, most people die in agony. A significant portion of this suffering is avoidable since it can be relieved with high-quality palliative care. The existing palliative care strategies in Sri Lanka aim to improve community-based palliative care by mainly involving curative primary care services. The Sri Lankan health system is based on a strong foundation of primary healthcare, where every citizen has access to free healthcare. The island-wide government healthcare delivery system consists of two primary care service streams: primary preventive care and primary curative care [33]. As preventive and curative primary care are two similar entities providing complementary services within the health system, given that both aim to address health problems that are common in communities, it is paramount to emphasize preventive health services in the venture to improve palliative care in the community.

Access to palliative care throughout the national strategies and policies has been considered primarily as a professional service delivery issue. This is a significant, perhaps dominant, point of view that is rarely evaluated. However, palliative care is a broader concept that cannot be achieved by health care alone. The public health approach to palliative care or health-promotive palliative care has much potential to improve palliative care in the community [16]. The health promotion approach has been widely recognized as a process of enabling individuals and communities to increase control over their health and improve their health status [34]. In most programs, community engagement in service delivery means using community resources (money, personnel, etc.) as a supplement to what is already available for the program. Communities don't have a significant impact on the program's development, evaluation, monitoring, or modification. Similar to the neighborhood networks in Kerala [27] community volunteers can identify the problems of people at the end of life and organize appropriate interventions which are then supported by trained primary health teams. Sri Lanka can use the existing health promotive initiatives at the ground level (Health Promoting Villages" or "Saukya Prawardhana Gamma") to support its development [35]. This strategy can turn palliative care into a grassroots movement, shifting responsibility and authority to the community and preventing overburdening of primary care [16].

The curative primary care service delivery system is not well suited to dealing with the overwhelming burden of NCDs that require coordinated and people-centered care [36]. Further, the existing home-based care through Public Health Nursing Officers in primary

care is grossly inadequate to meet the need. Even though, there have been many efforts to improve the skills and knowledge of primary health care workers, to identify, assess, plan, and manage quality services adequate human resources should also be in place. By incorporating the health-promotive palliative care model, primary care should be able to provide comprehensive people-centered primary palliative care, ensuring continuity by referring patients for specialized care when necessary and serving as the coordinating hub for the population with increasingly complex care needs. In addition, to provide mutual support and complementary services [social and financial aid, psychological needs support] accredited services should be connected to primary care. A relationship based on accreditation would guarantee transparency and high-quality services in the civil society sector.

Other than the National Cancer Control Programme, other stakeholders (Directorate of NonCommunicable Diseases, Primary care, Elderly health, National STD/AIDS Control Programme, Directorate of Mental Health, etc.) should be more actively involved in palliative care training and service provision at primary care level. Further, research on community engagement in palliative care and primary care is limited in Sri Lanka. As the application of evidence-based interventions in various settings can have varying degrees of success, implementation research should be encouraged. This can offer policymakers and implementers the knowledge they need to strive towards successful community-based palliative care integration with the efficacy, efficiency, and sustainability, required for long-term favorable outcomes.

Conclusion

Given its period of development and being a new concept compared to other health programs, palliative care in Sri Lanka has regained much improvement. It is important to recognize that it has taken many initiatives to improve and include palliative care in different sectors. However, there are ample opportunities and room for improvement including its integration into primary care. Palliative care integration into primary care already has many supportive policies, training, and service delivery opportunities. Community-based palliative care in Sri Lanka has the opportunity and the fundamentals put in place by existing curative and preventive primary care services and health promotion initiatives. Equal commitment from all parties involved in palliative care, networking with other sectors, using community assets, re-thinking service delivery, and implementing research is important for the successful

implementation of community palliative care services in Sri Lanka.

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Data sharing statement

No additional data are available.

Conflict of interest

The authors declare no conflict of interest.

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References

1. Connor SR, Gwyther E. The Worldwide Hospice Palliative Care Alliance. *J Pain Symptom Manage.* 2018;55(2, Supplement]:S112–6. doi: <https://doi.org/10.1016/j.jpainsymman.2017.03.020>
2. Poudel A, Bhuvan KC, Shrestha S, Nissen L. Access to palliative care: Discrepancy among lowincome and high-income countries. *J Glob Health.* 2019;9(2). doi: 10.7189/jogh.09.020309
3. World Health Organization. Assessing national capacity for the prevention and control of noncommunicable diseases: report of the 2019 global survey. Geneva; 2019.
4. Knaul F, Radbruch L, Connor S, de Lima L, Arreola-Ornelas H. and Mendez Carniado O. How many adults and children are in need of palliative care worldwide. *Global Atlas of Palliative Care.* 2nd edition. London: World Palliative Care Alliance and the World Health Organization; 2020.
5. Rajapaksa L, De Silva P, Abeykoon P et al. Sri Lanka health system review. World Health Organization Regional Office for South-East Asia., editor. Vol. 10, Health Systems in Transition. World Health Organization Regional Office for South East Asia; 2021. <https://apo.who.int/publications/i/item/sri-lanka-health-system-review>.
6. The Institute for Health Metrics and Evaluation. How long do people live, and how will that change? *Health Research by Location.* <https://www.healthdata.org/research-analysis/health-bylocation/profiles/sri-lanka> (Accessed 29th July 2023].
7. National Cancer Control Programme Sri Lanka. National Strategic Framework for Palliative Care Development in Sri Lanka 2019 - 2023. Colombo; 2019. <https://www.nccp.health.gov.lk/en/strategic>.
8. Binagwaho A, Ghebreyesus TA. Primary healthcare is cornerstone of universal health coverage. *BMJ Br Med J.* 2019 Jun 3;365. doi: <https://doi.org/10.1136/bmj.l2391>
9. World Health Organization. Assessing the development of palliative care worldwide: a set of actionable indicators. Geneva: World Health Organization; 2021.
10. Rotar Pavlič D, Aarendonk D, Wens J, Rodrigues Simões JA, Lynch M, Murray S. Palliative care in primary care: European Forum for Primary Care position paper. *Prim Health Care Res Dev.* 2019;20:e133. doi: 10.1017/S1463423619000641.
11. Olvera CE, Levin ME, Fleisher JE. Community-based Neuropalliative Care. *Neuropalliative Care, Part II.* Elsevier; 2023. p. 49–66. doi: <https://doi.org/10.1016/B978-0-12-824535-4.00001-X>
12. Paul S, Cree VE, Murray SA. Integrating palliative care into the community: the role of hospices and schools. *BMJ Support & Palliat Care.* 2019 Dec 1;9(4):31. doi:10.1136/bmjspcare-2015-001092
13. Association for Palliative Medicine of Great Britain and Ireland. National Survey of Patient Activity Data for Specialist Palliative Care Services 2013-2014; 2015. <https://apmonline.org/surveypages/national-reports/>.

14. Murray SA, Boyd K, Sheikh A, Thomas K, Higginson IJ. Developing primary palliative care. *BMJ*. 2004;329(7474):1056–7. doi: 10.1136/bmj.329.7474.1056
15. Abel J, Kellehear A. Public health palliative care: Reframing death, dying, loss and caregiving. *Palliat Med*. 2022;36(5):768–9. doi: 10.1177/02692163221096606
16. Mills J, Abel J, Kellehear A, Patel M. Access to palliative care: the primacy of public health partnerships and community participation. *Lancet Public Heal*. 2021 Nov 1;6(11):e791–2. doi: [https://doi.org/10.1016/S2468-2667\(21\)00213-9](https://doi.org/10.1016/S2468-2667(21)00213-9)
17. Kumar SK. Kerala, India: A Regional Community-Based Palliative Care Model. *J Pain Symptom Manage*. 2007;33(5):623–7. doi: 10.1016/j.jpainsymman.2007.02.005
18. Ministry of Health Nutrition and Indigenous Medicine. National Health Policy 2016-2025. Colombo; 2016.
19. National Cancer Control Programme Sri Lanka. National Strategic Plan on Prevention and Control of Cancer in Sri Lanka 2020-2024; 2020. [https://www.nccp.health.gov.lk/storage/post/pdfs/National Strategic Plan\(24-11-20\).pdf](https://www.nccp.health.gov.lk/storage/post/pdfs/National Strategic Plan(24-11-20).pdf)
20. Ministry of Healthcare and Nutrition Sri Lanka. The National Policy for Prevention and Control of Chronic Non-Communicable Diseases. 2009. https://www.ncd.health.gov.lk/images/pdf/publication/NCD_Policy.pdf
21. Ministry of Health Sri Lanka. National Strategic Framework For Development of Health Services 2016 - 2025. 2016. https://www.ncd.health.gov.lk/images/pdf/publication/National_Strategic_Framework.pdf
22. Ministry of Health Nutrition and Indigenous Medicine. National Elderly Health Policy Sri Lanka. Colombo: Ministry of Health Nutrition and Indigenous Medicine, Sri Lanka; 2017.
23. National Cancer Control Programme. Annual Report 2020. Colombo; 2021. <https://www.nccp.health.gov.lk/en/annualRepo>
24. National Cancer Control Programme. Annual Report 2021. Colombo; 2022. <https://www.nccp.health.gov.lk/en/annualRepo>
25. International Agency for Research on Cancer and World Health Organization. *imPACT Review; Cancer Control Capacity and Needs Assessment Report- Sri Lanka*. 2019. <https://www.nccp.health.gov.lk/en/reviews>
26. National Cancer Control Programme. Publications and Handbooks. 2023. <https://www.nccp.health.gov.lk/en/publications>. (Accessed 29th July 2023]
27. Kumar S. Public health approaches to palliative care: the Neighbourhood Network in Kerala. *International Perspectives on Public Health and Palliative Care*. Taylor and Francis; 2013 p. 1-210.
28. World Bank Group. Sri Lanka - Primary Health Care System Strengthening Project. Washinton DC; 2018. <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/306851530329751047/sri-lanka-primary-health-care-system-strengthening-project> (Accessed 29th July 2023]
29. Thekkur, P., Fernando, M., Nair, D., et al. Primary health care system strengthening project in Sri Lanka: status and challenges with human resources, information systems, drugs and laboratory services. *Healthcare*. 2022;10(11):2251. doi: 10.3390/healthcare10112251
30. World Health Organization. Palliative care. 2020. <https://www.who.int/news-room/factsheets/detail/palliative-care> (Accessed 29th July 2023]
31. Rush B, Hertz P, Bond A, McDermid RC, Celi LA. Use of Palliative Care in Patients With EndStage COPD and Receiving Home Oxygen: National Trends and Barriers to Care in the United States. *Chest*. 2017;151(1):41–6. doi: <https://doi.org/10.1016/j.chest.2016.06.023>
32. Ministry of Health Sri Lanka. Establish a standardized mechanism to provide home oxygen for patients with hypoxia. General Circular No. 01-04/2023. 2023. <https://www.nccp.health.gov.lk/en/circular>. (Accessed 30th July 2023]
33. Perera, S., Nieveras, O., de Silva, P., Wijesundara, C., Pendse R. Accelerating reforms of primary health care towards universal health coverage in Sri Lanka. *South-East Asia J Public Heal*. 2019;8(1).
34. World Health Organization. Ottawa charter for health promotion, 1986. World Health Organization. Regional Office for Europe; 1986.
35. Rajapaksa HNS, Guruge GND. "Happy Village" Concept Helping Villages to Face COVID-19. *Int J Coronaviruses*. 2021 Apr;2(4):54–7. doi: <https://doi.org/10.14302/issn.2692-1537.ijcv-21-3758> 36.



36. World Health Organization. Strengthening PHC in Sri Lanka: Engaging people to build an environment that is conducive to healthy choices and well-being. 2022. <https://www.who.int/newsroom/feature-stories/detail/strengthening-primary-health-care-sri-lanka> (Accessed 1st August 2023]