

Public sector primary care services in Sri Lanka and the specialist family physician: A qualitative study

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ABSTRACT

Introduction: In the background of a rising burden of non-communicable disease (NCD) Sri Lanka has prioritised reorganising primary care based on a family medicine approach. **Aims:** This study explored the integration of a relatively new specialist family physician (SFP) role into the state public health sector of Sri Lanka. **Methods:** In-depth qualitative interviews were conducted with 11 SFPs attached to the Ministry of Health. Data were analysed using inductive thematic analysis. **Results:** SFPs had faced initial challenges related to recognition and collaboration within the state health sector. They provided comprehensive primary care in a variety of roles; most importantly in care of NCD and elderly care, and focused on professional development of medical officers and support staff in the settings where they worked. Challenges were insufficient laboratory facilities, medication availability, primary care trained manpower and linkages with secondary care. These barriers hindered the ability of the SFPs to provide a full range of family practice-oriented health services. **Conclusion:** SFPs have integrated well into the public health sector of Sri Lanka providing comprehensive primary care services. The findings identify areas that need strengthening to further improve primary care services in the country and operationalise proposed new primary care service models.

Keywords: Public health sector, qualitative, specialist family physician, Sri Lanka

Introduction

Sri Lanka has achieved commendable outcomes in the areas of maternal and child health and communicable disease despite being a lower middle-income country. With a maternal mortality ratio of 29.2 per 100 000 live births in 2019 and infant mortality rate of 8.9 per 1000 live births in 2020 Sri Lanka ranks above many of the other South Asian countries in the region.^[1] Several communicable diseases such as Malaria, Filariasis, Rubella and Measles have been eliminated.^[2]

However, Sri Lanka is currently facing challenges in dealing with the fast-growing burden of non-communicable diseases (NCD) with an increasing proportion of the elderly population, sedentary lifestyles and unhealthy dietary habits. During the period from 2001 to 2010, premature NCD mortality in Sri Lanka increased from 15.8% to 19.1%.^[3] NCDs were estimated to account for 83% of all deaths in 2016,^[4] in 2018 the leading five causes of hospital mortality were ischaemic heart disease, neoplasms, zoonotic diseases, diseases of the respiratory system and cerebrovascular diseases.^[5]

In Sri Lanka 95% of inpatient care is provided by state sector hospitals, while 50% of ambulatory care is provided by the private sector. Primary care is provided at outpatient departments (OPD) of government sector larger hospitals and smaller hospitals such as divisional hospitals (DH) and primary medical care units. In

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the private sector, primary care is provided by OPDs of private hospitals, state sector doctors who practice out of official duty hours and full-time general practitioners.

In the public sector outpatient care traditionally focused on episodic care with little emphasis on continuity of care, disease prevention or health promotion. With the increasing burden of NCD in the country the ministry of health has focused on a family medicine approach to primary care as a sustainable solution to the challenge.^[6] A model known as the “shared care cluster system” has been proposed to facilitate more efficient and equitable delivery of care through a family doctor who would be responsible for providing continued care to a geographically designated population of approximately 5000 people. Services are to be grouped around a hospital providing specialist care at the apex (base hospital and above) linking with surrounding primary care institutions (DH and primary medical care units).^[7]

Family medicine was recognised as a specialty in Sri Lanka in 1979. A 1 year course leading to a Diploma in Family Medicine was launched by the Postgraduate Institute of Medicine (PGIM) in 1981.^[8] State sector doctors who completed this training were entitled to a grade promotion, however they were subsequently appointed to posts that were not dedicated to the practice of family medicine.

A postgraduate Doctor of Medicine (MD) and board certification as a consultant/specialist in family medicine by thesis was introduced in the late 1980s. MD by clinical training and examination as a 2-year course leading to board certification commenced in 2000. Since 2013 the residency has been increased to a total of 4 years and 10 months. The training programme consists of clinical rotations in hospitals, academic family medicine departments and family practices. Trainees must complete a dissertation on a research topic related to family medicine. A minimum 1 year of training in a recognised foreign training centre is also mandatory.

In 2009, the Medical Officer of Health (MOH) started releasing government employed medical officers to follow the MD clinical training programme. The first batch of ministry of health postgraduates received board certification as specialist family physicians (SFP) in 2012, and for the first time in the country family medicine was integrated into the government health sector with due recognition of the postgraduate training and qualifications in family medicine. Ministry of health SFPs were posted to divisional and base hospitals that provide both outpatient and inpatient care.

Nearly a decade has passed since appointment of SFPs to government hospitals but no evaluation has been carried out. This study aims to fill this gap and explores the experiences and perspectives of SFPs within the government health sector to enable evidence-based approach to future post graduate family medicine training and delivery of primary care services. The information may be useful to other lower middle-income

countries seeking to establish family physician centered primary care services.

Methods

Study design and sampling

A qualitative study design was selected to enable in-depth exploration of the experiences of the SFPs attached to the Ministry of Health, Sri Lanka. Due to the small number of eligible participants all 16 board certified specialists in family medicine attached to the ministry of health were contacted individually and invited to participate in the study. A total of 11 SFPs were interviewed to the point of data saturation over a period of 5 months from June 2021 to October 2021. Ethics approval for the study was obtained from the Ethics Review Committee of the Faculty of Medicine, University of Kelaniya on the 11th of May 2021.

Data collection and data analysis

An interview guide was developed based on the expert views of MD Family Medicine trainers and other SFPs. The initial semi structured interview guide explored the facilities available at the hospitals the SFP worked, the role of the SFP, their postgraduate training, challenges, current level of satisfaction with their work, impact on their workplace and aspirations for the future.

Two trained independent interviewers who were recent medical graduates of the Faculty of Medicine, University of Kelaniya conducted in-depth one-on-one interviews over the telephone. Written informed consent was obtained using the information sheet and consent form developed for the study. Interviews lasted on an average of 30 min and were audio recorded and transcribed verbatim by the two interviewers.

Inductive thematic analysis was conducted concurrent to data collection by two researchers working independently to code and categorise the data into themes through an iterative process of reading and rereading the data. Regular meetings were held among to discuss the analysis and refine themes. Throughout the period of data collection emergent areas of interest informed subsequent interviews and the interview guide was revised continuously. Respondent validity was conducted by sharing the findings with the participants to check that researcher interpretation of data was an accurate representation of participant experiences.

Results

Eleven semi structured interviews were conducted. Table 1 shows the demographic characteristics of study participants. Findings are categorised under five main themes.

Theme 1: Roles carried out by the SFP

Wide range of roles

SFPs played multiple roles depending on factors such as the usual practices of the individual hospital, the population served, number of other medical officers in the hospital, gender of the SFP and

Table 1: The demographic characteristics of study participants

Characteristic	Number
Gender	
Male	7
Female	4
Age range	
49-53 years	9
54-59 years	2
Type of hospital	
Base hospital	1
Divisional hospital	10

the individual special interests of the SFP. One SFP described how substance abuse was an important problem in the area he worked and how they were proactively managing these patients.

In many divisional hospitals the SFP was the only specialist supervising the management of wards, emergency treatment unit and multiple clinics with the help of a team of medical officers. Most SFPs only visited wards on request. Patients were referred to the SFP from the OPD, wards and different clinics.

The different roles are summarised in Figure 1.

Wide range of morbidity

SFPs dealt with a wide range of morbidity. Many SFPs mentioned that there was a high primary care geriatric patient burden. Other clinical areas were management of chronic disease and gynaecological problems.

“The regular patients are elderly patients. Common problems are hypertension, diabetes, dyslipidaemia, depression. The spectrum is quite wide.” SFP1

Educational role

An educational role was highlighted by many SFPs. Some of them conducted regular patient education sessions. Others were involved in undergraduate and postgraduate teaching as well as conducting teaching for other categories of health care workers and doctors at their institutions. Some had developed health education leaflets to be given to patients

“I’m doing lectures on lots of topics like COVID, Dengue, wound care. Planning to give chances for the medical officers also to come and talk on a particular topic in the future. Now they are engaging in reading and discussions. So, a consultant family physician can engage in such a role as well; empower and encourage on CPD activities and improve knowledge and clinical skills.” SFP4

Changing roles due to COVID 19

This study was conducted during the COVID-19 pandemic and it could be seen how the roles of SFPs changed to adapt to the pandemic situation. Some SFPs had temporary roles such as managing medical clinics and medical wards because the

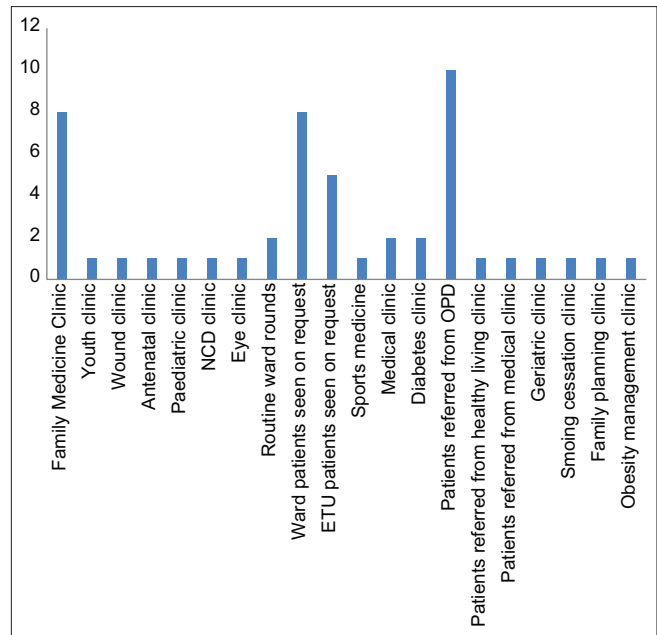


Figure 1: Roles carried out by the SFP

internal medicine specialist was heavily involved in caring for COVID-19 patients.

One SFP with special training and qualifications in psychology participated in providing counselling and psychological support to COVID patients.

It was evident that SFPs ensured that care of chronic diseases was continued optimally during the pandemic. Some SFPs had increased the number of clinic days per month to prevent overcrowding on clinic days.

All the participating SFPs were actively involved in the government approved integrated home care management programme for asymptomatic and mildly symptomatic COVID-19 patients and regularly conducted telephone consultations on an on call roster basis.^[9]

Theme 2: Family medicine approach

SFPs practised according to the principles of family medicine. They described multiple initiatives they had taken to empower and engage patients and provide comprehensive care. With their holistic orientation some had initiated individual and family counselling activities in addition to management of physical problems and health promotion and prevention.

“There are about 4000 patients registered to the family medical clinic as well as minor procedures, health education, preventive care and referring to the necessary person, all this is done by my clinic.” SFP 2

“Intra-articular injections were started and using inhalers I have started and wound care. I see all chronic wounds and I

am conducting a foot care clinic and diabetic eye clinic also. If necessary I refer.” SFP10

One SFP had initiated an efficient patient and staff feedback system.

“I am maintaining a feedback book for the clinic people, after their consultation they can provide feedback in that book. I have collected good ideas from patients and the staff too” SFP6

With the family medicine emphasis on continuity of care some SFPs had initiated a records system where there had been no such system before.

Several SFPs related how they had influenced interactions between patients and other staff.

“Have been able to influence how other hospital category staff handles patients with respect and kindness.” SFP3

“Initially when I went there, there was a little bit of communication gap with the patients. Sometimes there had been unpleasant situations. But I made that situation clear by example, how I communicate with patients and now there is no problem like that. Doctor patient relationship seems to be very good at the moment.” SFP7

As one SFP described,

A good family physician should have a wider knowledge, not very deep. You have to feel the patient. They are individuals with some social role to fulfil. Every possible, every available investigation and drug are not the best possible option for each and every patient. So that training we should give but that change of attitude is a little difficult. SFP 7

Theme 3: SFP postgraduate training and continuing professional development

Postgraduate training

Most of the participants were satisfied with the postgraduate training they had received and its relevance to practice.

However, some stated that it would have been more useful to have received a longer duration of training and experience in hospitals where they were more likely to get their final placements such as divisional and base hospitals as opposed to university, general practice and teaching hospital settings.

“The training is very useful and adequate. We participated in consultant family physician training programmes, audits and did research activities, according to the family medicine principles also we learnt well, also evidence-based learning.” SFP9

Continuing professional development

Participants emphasised the importance of continuing professional development.

“They can’t teach you everything during the training period. There are a lot of resources where you can learn. So, you also have to do that. You can’t expect from the training all the things.” SFP10

Theme 4: Challenges

Logistical challenges

Currently most SFPs are placed in divisional hospitals which are at the primary level of health care. The hospitals are managed by a medical officer in charge and a small team of medical officers who are accountable to the regional director of health services. One participating SFP worked in a Base hospital. Base hospitals are larger hospitals that provide specialist inward care and specialist clinic services as well as radiology, laboratory and blood transfusion facilities.

Most of the SFPs had problems due to lack of medical officers, support staff, laboratory and imaging facilities, some medications as well as lack of appropriate physical infrastructure to enable the provision of high quality care. There appeared to be minimal linkage or coordination with the relevant secondary care institution regarding access to further services for patients.

“Only basic investigations are available. Other investigations we have to send to nearby hospital. With only our clinical knowledge we have to manage patients and patients have to spend lot of money to get investigations done from outside. Those who can’t afford, we refer to other government hospitals only for the investigations. Sometimes reports get delayed or missing.” SFP9

“If they can establish a quota system for necessary investigations to be done at nearby large hospitals or allocate a day for divisional hospital patients to make use of services available e.g., at physiotherapy unit at nearby larger hospital.” SFP4

“You have to have primary care trained medical officers, nurses and minor staff in this sort of a hospital. When you don’t have staff, you can’t give a proper care.” SFP7

Some SFPs had obtained donations from non-government sources to upgrade the facilities.

“Lack of proper seating, toilets, patient waiting area infrastructure, basic medical equipment like BP monitors, nebulisers; managed to develop with help of donations from non-governmental local organisations.” SFP6

“You need some sort of privacy, which is not possible at the hospital currently because we don’t have doors to close the consultation rooms. Sometimes the confidentiality is not maintained.” SFP7

Recognition and collaboration with other health care professionals

Some SFPs has faced initial challenges in working cooperatively with the other members of the health care team in the hospitals they

were placed. These issues had resolved over time as patients, other health care staff, doctors and other specialists had become more aware of the role and place of the SFP. Some SFPs mentioned that their work had an impact on how they were perceived by others.

“Initial problems with support from other staff due to lack of awareness about the role and place of consultant family physician which have resolved but I believe that all newly placed consultant family physicians will have to face this problem initially.” SFP 4

“If you do a good job they recognise you. That’s why you have to be competent. You have to show that you have the knowledge.” SFP10

“Our role was not very clear initially to the staff and all. I took over the family medical clinic and the healthy lifestyle clinic. I started seeing all the new patients at the family medicine clinic and referrals from OPD, wards and other hospitals. Now my role is well established in the hospital. Mainly the quality of care was improved.” SFP 9

Back referral of patients referred to secondary and tertiary care was common as well as referral to and from other specialists within the institution.

“Visiting physicians, paediatrician, visiting obstetrician and gynaecologist all refer relevant patients to me. I can get the help of other consultants when necessary, because of good relations.” SFP1

One SFP described how maintaining a good professional relationship with another SFP was of mutual benefit.

“I discuss my problems with the other consultant family physician nearby. We discuss when we encounter a problem and we help each other in difficult situations. That is one way we improve professionally and support each other.” SFP7

Theme 5: Health policy and planning

Potential to reduce secondary care burden

SFPs expressed the need to establish a dedicated population for a SFP and a referral system to secondary care to reduce overcrowding in larger hospitals. One SFP mentioned that the number of referrals to the nearby bigger hospital had declined after her appointment to the hospital.

“Primary care is important in reducing the unnecessary burden and crowd at secondary care hospitals. If you improve the manpower in the primary care setting, like trained medical officers, nurses and provide more facilities that would be greatly helpful to improve the healthcare system.” SFP7

Improving primary secondary care linkages

SFPs mentioned the importance of improving links between primary and secondary care.

“There should be a collaboration between the administration, the people who are appointing and the people who are responsible for providing the facilities.” SFP6

Where should SFPs be placed in the public health sector hierarchy?

Opinions were markedly divided on whether SFPs should work in base hospitals or divisional hospitals. Some SFPs said that working in a base hospital where other consultants are working would restrict SFP management of patients in disciplines in which relevant specialists were available.

Others had different views

“Because this is a divisional hospital, the OPD patients are comparatively less. Base hospital or teaching hospital you get more patients at OPD. We have to be based in these bigger hospitals and we have to manage the peripheries also with the help of the medical officers. They can refer to us the patients from the peripheral hospitals.” SFP10

“Wherever the primary care is there, we should be there. Either it be a district hospital, base hospital or a divisional hospital. In a higher level hospital we can do more, as there are investigation facilities and all. But at the primary care hospital also we can do a good service if we are provided with at least the basic facilities.” SFP9

SFPs mentioned that there should be clear guidelines regarding the role and place of SFPs within the public sector health care system. They described the need to create more awareness on the role of a SFP among the community and health care sector.

“I am doing what I want and the others are doing what they want. That is not uniform. So that is the first thing we want to rectify.” SFP5

Discussion

This study aimed to explore the experiences and perspectives of the SFP working in the Sri Lankan state health sector. We found that SFPs are engaged in a wide range of roles and had a major impact on the provision of high-quality primary care services based on the concepts of family medicine. However, they faced significant barriers with regard to availability of manpower, infrastructure, medications and linkage with secondary care services similar to the situation in other countries in the region.^[10]

The SFPs in our study had to adapt and innovate in their newly created posts. SFPs were competent providers of preventive, curative and long-term care for patients in a wide range of roles especially care of the elderly and management of chronic disease either in a family medicine clinic setup or working in the NCD clinics. Many had demonstrated their leadership skills; effectively mobilising local donors to upgrade their hospitals and commencing new primary care services. Many of the SFPs

engaged in an educational role and in future they will be a valuable resource for capacity building of the primary care workforce.

The COVID-19 pandemic saw the SFPs stepping up to support the government health sector in managing the crisis in both hospital and home care contexts. While it was widely reported that people with chronic disease had a deterioration in their chronic disease control during the COVID-19 pandemic.^[11,12]; with an emphasis on care coordination, continuity of care and personalised care the SFPs in our study had been instrumental in continuing usual care for these patients.

In Sri Lanka, despite government health services being free at the point of care the distribution of outpatient care is equal between state and private sectors. Studies have shown that the standard of clinical care is similar in both settings and that more affluent patients may opt to utilise private outpatient care due to factors such as shorter waiting times, longer consultations and better communication in private outpatient settings versus restricted services hours, shortage of medicines, overcrowding and limited facilities for investigations in state outpatient settings. Click or tap here to enter text.^[13] The SFPs in our study highlighted the importance of good communication and doctor–patient relationship and believed they had exerted a positive influence on the interpersonal aspects of patient care in their settings. With an increasing global emphasis on the need to provide competent patient centered care aligned with the sustainable development goals,^[14] SFP leadership may facilitate improvements in the patient experience aspect of government sector primary care services in Sri Lanka.

Sri Lanka has a strong public health sector which had enabled the remarkable achievements in maternal and child health, and communicable disease. In contrast family medicine emphasises a personalised approach to prevention and health promotion and the participants in our study had been proactive in empowering patients through patient education and engagement in health promotion and preventive activities.

Most SFPs in the study were satisfied with the training they had received and found the training in line with their current duties. However, some participants stated that more time should be dedicated to training in hospitals where they would finally be placed as opposed to tertiary hospital, university and general practitioner clinic settings. However, while the SFPs participating in this study were all from the public sector the MD family medicine programme includes trainees from universities and private sector primary care therefore the training has to be appropriate for doctors from different working contexts. However, the findings emphasise the importance of regular critical evaluation of postgraduate training.

Despite initial challenges in integration into the state health system most SFPs described how they went on to have good collaboration with the health care professionals and support staff within their institutions with time. The initial resistance

was thought to be due to a general lack of awareness of the role of SFPs within the health care system and a similar theme of unfamiliarity and resistance to acceptance of postgraduate training in primary care has been witnessed in Indonesia.^[15]

There was much improvement needed in the linkage between primary care and regional secondary care services. SFPs were working in silos and pointed out the need for easier access to investigations and secondary care services for the patients referred by them to the relevant secondary care hospital. The proposed cluster system is based on an efficient referral pathway which is yet to be established.

Regardless of whether SFPs are stationed in divisional or base hospitals if the proposed changes are operationalised through upgrading investigation facilities, better access to medications, physical infrastructure, availability of primary care trained manpower and establishment of primary secondary care linkages, SFPs would be well placed to streamline service delivery through a well-established referral pathway and provision of high quality, easily accessible and cost effective preventive and curative primary care services. This could lead to improvements in the current disease epidemiology in a cost-effective manner. In addition, this could reduce overcrowding at the secondary care level and ensure more equitable access to high quality primary care to all citizens in line with the goals of universal health coverage.^[16]

Limitations

This study only explores the views of the SFPs and larger studies that include other primary care providers could provide more information.

Conclusions

Despite being a relatively new role within the government primary care sector, SFPs had overcome initial barriers to make a considerable impact on primary care service provision in the country. SFPs could make a significant contribution to the proposed plans to strengthen and reorganise primary care.

Key messages

SFPs provided comprehensive, patient centered care in a variety of roles with a focus on NCD and elderly care.

SFPs prioritised professional development of medical officers and support staff and would be an important resource in primary care manpower development.

SFPs played an important role in the management of COVID-19 in Sri Lanka.

SFP training needs are evolving according to their roles and service needs.

Limitations in access to investigative facilities, drugs, trained manpower and primary secondary care linkage were barriers to provision of high-quality patient care.

There was initial resistance to recognition of a SFP role within the public health care sector that resolved over time.

Recommendations

Utilise the knowledge and skills of the SFPs in an educational role to increase capacity of medical officers and support staff engaged in primary care services through workplace-based training.

SFP training should be continuously and critically evaluated.

It is imperative that laboratory facilities, availability of medications, physical infrastructure and primary care trained manpower is strengthened in SFP stations.

Practical provisions and pathways should be set up to enable efficient linkages between primary care, secondary care, public health and policy makers.

The Ministry of Health should clearly define the duties associated with the role of the SFP and support the development of this role within the government primary care sector.

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Conflicts of interest

There are no conflicts of interest.

References

1. Family Health Bureau. Ministry of Health, Sri Lanka. Statistics. Available from: <https://fhh.health.gov.lk/index.php/en/statistics>. [Last accessed on 2021 Nov 12].
2. WHO congratulates Sri Lanka for eliminating mother-to-child transmission of HIV, Syphilis. Available from: <https://www.who.int/southeastasia/news/detail/10-12-2019-who-congratulates-sri-lanka-for-eliminating-mother-to-child-transmission-of-hiv-syphilis>. [Last accessed on 2022 Apr 30].
3. Ediriweera DS, Karunapema P, Pathmeswaran A, Arnold M. Increase in premature mortality due to non-communicable diseases in Sri Lanka during the first decade of the twenty-first century. *BMC Public Health* 2018;18:1-6.
4. Noncommunicable diseases country profiles 2018. Available from: <https://apps.who.int/iris/handle/10665/274512>. [Last accessed on 2022 May 01].
5. Medical Statistics Unit. Ministry of Health, Sri Lanka. Annual Health Bulletin 2018. *Annual Health Bulletin* 2018;33:1-276. Available from: http://www.health.gov.lk/moh_final/english/public/elfinder/files/publications/AHB/2020/AHB_2018.pdf.
6. Health Strategic Master Plan 2016-2025; health administration and HRH. Colombo; Policy Analysis and Development Unit. Ministry of Health - Sri Lanka. 2016; IV.
7. Perera, Niveras O, Silva P de, Wijesundara C, Pendse R. Accelerating reforms of primary health care towards universal health coverage in Sri Lanka. *WHO South-East Asia J Public Health* 2019;8:2-5.
8. Ramanayake RPJC. Historical evolution and present status of family medicine in Sri Lanka. *J Family Med Prim Care* 2013;2:131-4.
9. WHO Sri Lanka collaborates with Ministry of Health to provide an integrated home-based care for asymptomatic and mild COVID-19 cases. Available from: <https://www.who.int/srilanka/news/detail/1/17-09-2021-who-sri-lanka-collaborates-with-ministry-of-health-to-provide-an-integrated-home-based-care-for-asymptomatic-and-mild-covid-19-cases>. [Last accessed on 2022 Jan 8].
10. Sriram S. Availability of infrastructure and manpower for primary health centers in a district in Andhra Pradesh, India. *J Family Med Prim Care* 2018;7:1256-62.
11. Danhieux K, Buffel V, Pairon A, Benkheil A, Remmen R, Wouters E, *et al*. The impact of COVID-19 on chronic care according to providers: A qualitative study among primary care practices in Belgium. *BMC Fam Pract* 2020;21:255.
12. The impact of the COVID-19 pandemic on non-communicable disease resources and services: Results of a rapid assessment. Available from: <https://www.who.int/publications/i/item/9789240010291>. [Last accessed on 2022 Jan 21].
13. Ministry of Health Nutrition and Indigenous. Sri Lanka Essential Health Services Package. 2019. 70 p.
14. Kruk ME, Gage AD, Arsenault C, Jordan K, Leslie HH, Roder-DeWan S, *et al*. High-quality health systems in the Sustainable Development Goals era: time for a revolution. *Lancet Glob Health* 2018;6:e1196-252.
15. Ekawati FM, Claramita M, Istiono W, Kusnanto H, Sutomo AH. The Indonesian general practitioners' perspectives on formal postgraduate training in primary care 11 Medical and Health Sciences 1117 Public Health and Health Services. *Asia Pac Fam Med* 2018;17:1-8.
16. Universal Health Coverage. Available from: https://www.who.int/health-topics/universal-health-coverage#tab=tab_1. [Last accessed on 2021 Dec 29].