Jaffna Medical Association



Profeessor. C. Sivagnanasundram Oration - 2021

Challenges drive Innovation-A pragmatic approach to Primary Care

By

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Preamble

Professor C Sivagnanasundram affectionately known as "Nanthi was an eminent, writer community physician great teacher and above all a person with humane touch.

He obtained the degree from the University of Ceylon in 1955 and served in the state health services for several years, in 1965 he joined the department of preventive and social medicine at the Faculty of medicine, university of Ceylon Peradeniya.

In 1968. He obtained the DPH (London) and was awarded the PHD by the University of London in 1971.

In 1978 professor Sivagananasundram moved to the newly established Faculty of medicine at the University of Jaffna as a founder professor of community Medicine and held this post unitil his retirement. He continued to serve in this capacity for 12 years even after formal retirement.

His contributions to Faculty of medicine were wide and varied and were not limited to medicine profession. His book "learning Research "has had two editions and widely used by both medical undergraduates and postgraduates.

His talents go well beyond his academic contributions. He has Written many novels and short stories and many of his novels have received Srilanka Shakithya academy awards.

I sincerely hope that my oration in his name will do justice to Professor C Sivagnanasundram's ideologies

Challenges drive Innovation-A pragmatic approach to Primary Care

"History shows us that if you can see it, you can create it. If you have a vision, you also have the power to make it happen and you will find a way forward...!"

Good evening Ladies and Gentle men. Thank you to each and every one of you for being here with us today. It gives me great pleasure to stand before you today to deliver this oration on "Challenges drive Innovation-A Pragmatic Approach to Primary Care."

Before I get started, I would like to express my sincere appreciation to all of you who gathered here and generously helped us to make this event come together to become a success.We could not have done it without you.

Now I will start by paying tribute to Prof.C.Sivagnanasundram, a giant who made valuable contributions as a medical professional, an academic, a teacher, a researcher and above all a kind and considerate human being.

Today, we are here in large part as a result of the vision of this giant and the visions of the others who involved in Alma Ata declaration.

But we are also here because we should acknowledge that we have achieved part of that vision and we have also made enormous progress.

Introduction: Primary Care

Primary Care, a provision of integrated, accessible health care services by physicians and their health care teams who are accountable for addressing a large majority of personal health care needs developing a sustained partnership with patients, and practicing in the context of family and community. The care is person-centered, team-based, communityaligned, and designed to achieve better health and better care at lower costs (1). Family Medicine is the focal point of the Primary Care and unlike other specialties that focus on a specific organ or disease, family medicine is a field in which physicians treat most ailments and provide comprehensive health care to people of all ages-from newborns to seniors.

But there are many challenges in providing the primary care. Such as limited infrastructure, lack of multidisciplinary approach in team work, inadequate government policies and money allocation for development and lack of awareness programs about primary care service delivery among the population.

In order to overcome these challenges, we need to have a compelling vision and a comprehensive plan. Therefore Prof.C. Sivagnanasundram's vision about primary care has been used as a fundamental concept to overcome the challenges and move forward to provide primary care to all.

Prof.C.Sivagnanasundram's Vision for developing Primary Care

Vision is just more than a goal, it is the embodiment of our hopes and dreams in a particular area; the image of what has not yet happened, but what the future may hold.

Prof.C.Sivagnanasundram's vision on developing primary care is, "Collaborating Family medicine with Community medicine will uplift the prevailing primary care system, in which the public should be an active participant, and this system will provide health care according to local needs". He also emphasized the importance of integrating family medicine and community medicine to facilitate vertical and horizontal integration in the medical curriculum.

As we all know, great people's visions influence others because they have a strong motivating effect on everyone. As a result, visions become their followers' dreams and ambitions, creating energy and enthusiasm, increasing commitment, and fostering change. Their followers work hard to make the dream into reality. It will be accomplished by tackling hurdles as they come along, and it will be reflected through real efforts that produce real results. It will not happen in one day. It will take time, but it will happen eventually. Let's look at a real-life story of how a vision comes alive.

A journey to make the Dream into Reality.

This journey is about where we were yesterday and where we are today in developing primary care system. Every successful journey starts with the first step towards the destination. The destination of our journey is to accomplish Prof.C.Sivagnanasundram's vision and the first step was to plan the journey. Before starting on any journey, it is necessary to plan the necessities that will be required to complete the journey. There three important factors to be considered. Such as;

- A vehicle
- Road Map
- Energy

To begin the journey, first we'll need a vehicle. Next we need to know where we are heading and how we are going to get there. We need a Road Map to figure this out. Then there's the energy required driving the vehicle to our destination.

Vehicle

The followers, which include the core research team, create the vehicle. An engine is the main component of any vehicle that is designed to convert one or more forms of energy into mechanical energy, creating motion in the process. Similarly, in order to accomplish the journey, our vehicle engine is comprised of three principles. Such as;

- Participatory Action Research (PAR) methodology
- Principles of Family medicine (FM)
- Community Oriented Primary Care (COPC)



Figure 1 – Describing the engine

Participatory Action Research (PAR)

Participatory Action Research (PAR) is a research methodology in public health research, where the researchers and participants work together for the betterment of their living community. It has been used since the 1940s and it focuses on research whose purpose is to enable action. It is an iterative cycle of research, action, and reflection; and it frequently seeks to 'liberate' participants to have a greater understanding of their position in order to take action. PAR employs a variety of qualitative and quantitative techniques (2).

Principles of Family medicine (FM)

It mainly talks about the conduct of a family physician, who is the focal person in primary care service profession. Family physician lives in that community where the professionals practice. It is committed to patient, understand the context of patient's illness, consider the patient as the continuum and the episode as the disease. Further principle of Family Medicine has insight into relationships with patients and is aware that a doctor's attitude, values and feelings are important determinants in the practice of medicine, and see patients in the office, home or hospital. It sees the practice as a population at risk, consider every consultation as an opportunity for prevention of disease and promotion of health, Family Medicine is the center of a network of primary care (3).

Community Oriented Primary Care (COPC)

Community oriented primary care (COPC) is a strategy that systematically develops and integrates elements of primary care and community medicine into a coordinated practice(4). Basic features of COPC are:

• The delivery of primary clinical care to individuals and families in the community, with a focus on continuity of care. Appropriate arrangements for consultative services, specialist care, and hospitalization must be made. When assessing needs, planning and providing services, and evaluating the effects of care, a focus on the community as a whole and its subgroups is essential. As you all know primary care is the first level of contact of individuals and communities with the healthcare system. When a patient with problem approach the primary care, by amalgamating scientific concepts outlined above, the engine is now ready for ignition, resulting in active patient-public involvement engagement (PPIE).

Patient-public involvement engagement (PPIE)

It refers to an active partnership between members of the public and researchers. Involvement and engagement of patients and the public is an important and expected component of health-related research and project. The term "public" can refer to patients, caregivers, and people who use health and social care services, as well as people from organizations that represent people who use services. The term "public engagement" refers to the various ways in which the activity and benefits of higher education and research can be shared with the general public in a two-way process. Engagement helps researchers to listen and interact with the public. Patient and public involvement are focused on a specific research project, program, or process, engagement that can connect with the public on a more general level to discuss science (5).

Further, when a vehicle is used for a long trip, it is prone to breaking down. As a result, whenever a vehicle breaks down, we require individuals to repair it. Similarly, we have wonderful people who will assist us whenever we have a problem. We have a group of mentors with us to help us resolve any issues that arise during the course of our journey.

Road Map

A road map is essential to determine how we will get at our destination. Creating this road map with the cooperation of many people entails a number of steps. It was formulated by the core research team with the help of administers and is made up of four main steps. Namely;

Step 1: Initiating a new primary care system

Step 2: Improving the above new primary care system

Step 3: Transferring the experience to the whole Northern Province

Step 4: Establishing the primary care the centre of excellence

Energy

The vehicle and road map are now ready to begin the journey. But you cannot drive the vehicle without any energy. Our vehicle engine is not inanimate. It is made up of people and it will get its energy from challenges. As a result, we refer it as "Challenges drive Innovation". The generation of energy can be explained by a simple mechanism known as "wind mill" model. A windmill model is used to depict clearly and succinctly the interrelationships among the various parts of the model and to explain the critical role of each parts.

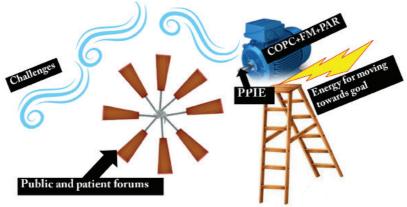


Figure 2–Describing the pragmatic approach

A wind mill mainly consists of two major parts. Such as the motor and wings. The motor represents the three core theories (COPC, PAR and principle of family medicine) and the wings represent various public and stakeholder forums.

Our journey is driven by the challenges, just as a wind mill is driven by

the wind. We all know that the power generated is determined on the wind speed and the number of wings. Similarly, challenges (WIND) and public and stakeholder forums (WINGS) enable the core three theories (MOTOR) to function and identify the solution (ENERGY generation) for providing an effective, sustainable, and high-quality primary care service.

Now that the vehicle, Road map and energy are in place, we will embark on a journey of innovation driven by challenges.

The Pragmatic Approach: Challenges drive innovation

Challenges activate the patient-public involvement engagement (PPIE), which not only provides an innovative solution to the problem, but also uplifts the primary care system to the next level. There are three key principles facilitate PPIE,Such as Community oriented primary care (COPC), Principle of Family medicine and Participatory action research (PAR).

Every successful journey has a story about challenges and the innovative solutions that emerged as a result of those challenges. The challenges may appear to be difficult, but the fulfillment and zest for life that your success journey can provide is unimaginable. The challenges we faced and the innovative solutions that comes as a result of those challenges are given below.

Let's take a look at how the challenges resulted in an innovative solution. The challenges are grouped into four clusters and numbered from set 1 to set four.

Challenges Set 01 (2011-2012)

Challenge: Identifying the focal point and partners

The challenge here was to identify the focal point and partners. It is necessary to find a physical space and a geographically defined population to deliver the primary care. As stated above, the windmill model was activated by the challenge and identified an opportunity. The idea was exhibited in the faculty of medicine exhibition in 2011. That opportunity provided many resources mainly from senior academics, few well-wishers, health ministry of Northern Province and the resources helped to identify the solution.



Figure 3 - Exhibiting the idea of new primary care model - 2011



Figure 4 –Family Health Centre opening ceremony - 2012

Figure 5 -Functioning Family Health Centre – 2013

Innovative Solution

The FHC had started its service by delivering clinical care to patients with chronic health problems and conducted regular home visit to provide community based rehabilitation and palliative care.

Institutional based activities: chronic illness management and laboratory services

Community based activities: Home visit for community based geriatric care



Figure 6 – The team ready for the Home visit team -2012

New knowledge

Practical method of incorporating Family medicine approach into a functioning primary care and many publications were made based on the above experiences (annexure).

Challenge	Solution
Identifying the focal point and partners	Kondavil Village as geographically defined population and famil health center as focal point

Challenges Set 02 (2012-2017)

Challenge: Inadequate staff and resources

Challenges faced in set 02 were inadequate staff and resources to continue the activities. The challenges were discussed in detail at the faculty board and university administration became more resourceful as result of this meeting. The resources helped to identify the solutions.

Innovative Solution

Family medicine curriculum was developed in detail, new carders were created in University of Jaffna and the university system was rationalized to provide more staff members, equipment, and infrastructure modifications. Further, community members were trained through Community empowerment activities.

"Communities" are groups of people that may or may not be spatially connected, but who share common interests, concerns or identities. 'Empowerment' refers to the process by which people gain control over the factors and decisions that shape their lives. It is the process by which they increase their assets and attributes and build capacities to gain access, partners, networks and/or a voice, in order to gain control. "Enabling" implies that people cannot "be empowered" by others; they can only empower themselves by acquiring more of power's different forms. It assumes that people are their own assets, and the role of the external agent is to catalyse, facilitate or "accompany" the community in acquiring power (6).

Community members were recruited to work as health care providers in the FHC through community empowerment projects. Furthermore, the community's active participation encourages the project's continuation and successful completion. This will result in more effective resource management and will aid in the activity of building trust between researchers and the community.

New knowledge

An effective way (effective & efficient utilization of available resources along with patient public involvement engagement) of service delivery and medical education of Family Medicine approach in rural set-up were identified (annexure).

Challenge	Solution
Inadequate staff and resources	New carders and positions were developed by FOM, UOJ Community members were trained to practice in health care

Challenges Set 03 (2017-2020)

Challenge: There were two gropes challenges identified here

There were two groups of challenges identified in set 03.

A. Patients and families with complicated psychosocial problems, which includes families of children with neurodevelopment disorders, poor performance of adolescents, caregivers of patients with terminal illness and elders with chronic illness and loneliness.

B. Problem in medical student family medicine clinical teaching.

The pragmatic process identified the most appropriate Innovative Solutions, which are listed below.

Innovative Solution

- Play therapy was identified as a solution for children along with parent empowerment. Play therapy is a one-of-a-kind treatment that is not only geared toward young children, but is also translated into a language that children can understand and use: the language of play. The game will assist them in developing self-esteem, life skills, social interaction, communication, and pre-learning abilities (7).
- A structured plan for play activities was developed, and young unemployed girls in that community were trained to run the program. The program focuses on two things: developing children's skills and empowering parents. Motor skills, skills, socialization, and pre-learning skills are all taken into account. Friends of Manipay Hospital provided physical space and financial support. There are 15 children in present, and their parents are actively involved. Parents are given monthly clinical appointments to discuss the progress of their child's individualized plan. The young girls work as shadow teachers in home-based neurodevelopment care, as well as providing emotional support to the children's mothers.
- A systemic approach is recommended to deal with adolescent related psycho-social problems. Here a systemic approach suits to the local contest was developed and named it as Learn-Lead-Live (LLL) module. Introduction of LLL (Learn Lead Live) module for students, teachers and parents which is targeting the adolescents to enhance their psychosocial wellbeing through participation in extracurricular activities. In addition, LLL has guidance for teachers and parents. The LLL module was developed by using PAR methodology with the students of grade 10, Kokuvil Hindu Collage. Educationists and psychologists were contributed in developing the module. Medical expertness and financial support were given by Jaffna Medical Association committee 2019 and 2020. The students showcased their performance on the day of regional World Health Organization program.
- Self-care management approach is recommended to deal with geriatric related psycho-social problems. A self-care management guide for elders was developed while considering the suitability for the local contest. This guide is aimed at people over the age of 60. This guide includes information on how to learn about their disease, self-care management of their diet, physical activities, relaxation,

maintaining ace of activity aids, and dealing with loneliness(8). Unawareness of the chronic illness condition, irregular clinic followups, and loneliness were identified as psychosocial issues among the geriatric population. Senior consultants from community medicine and geriatric medicine, as well as a few members from the Global NIHR research project-Sri Lanka, served as experts in developing a module to help the population overcome these challenges. The module has been published.

• Integrated teaching method was identified as the best solution to deal with the challenges in teaching family medicine at final year. Department of Psychiatry gave the opportunity to conduct -Integration of Family medicine and Psychiatry in medical education (9). Final year Family Medicine clinical teaching was integrated with Professorial psychiatry appointments as a two-day per week commitment. Here stimulated patients based clinical teaching is practiced to discuss in detail how to address community-based mental health issues.

New knowledge

Created/identified standard modules /procedures as problem solving guides to the public with psycho-social problem and found out the implementation strategy for the planned interventions that is culturally acceptable to the community.

At this point, the system was confronted with an unexpected set of challenges resulting from the COVID-19 pandemic and its consequences.

Challenge	Solution
A. Patients and Families with complicated psychosocial problems	Stratured play activites Leran - Lead - Life module Self-care management guide for elders Home visit Caregiver empowerment.
B. Problem in Medical student clinical teaching.	Family medicine teaching was integrated with Professorial psychiatry appointment

Challenges Set 04 (2020-Present)

Challenge: The Challenge was conducting Clinical service delivery and Medical education during the period of COVID 19 pandemic.

In primary care, this pandemic posed a challenge for providing continuous and comprehensive patient care. Because of the fear of spreading the infection, all vital clinical services for patients were halted, and clinical teaching of medical students became a huge practical problem. That paved the way to 'Twin Epidemic' condition by developing complications as a result of sedentary lifestyle and missed clinical follow-ups.

Innovative Solution

- Here choric illness care model at primary care was identified as the suitable approach to deal with the problems related to provide clinical care to patients with chronic illness. A chronic illness management guideline was developed according the local contest. Implementation of chronic illness management guideline for primary care designed specifically for FHC Modified the FHC's infrastructure which was with the help of public forum. A local guideline was developed for Family Health Center by considering social distance and the time of exposure or direct contact. An appointment system was developed for follow-up patients. Service delivery path was divided into stations and responsible staff members were allocated for each station in order to reduce the time duration for direct contact. Trained community members contributed for the need of human resource. Also patient welfare society arranged a triage system and handwash facilities for the first-line safety measures (10).
- A helpline service was developed to the patients who could not reach FHC for routine clinic follow-ups due to the lockdown, social isolation, and transportation issues. As a result, a helpline was established for them to contact FHC for assistance. The consultation was provided via telephone as well as home visits for those in need (11).
- A new research methodology, known as research with routinely collected data, has been developed (12); it is because COVID-19

disrupted the usual methods of collecting data from the community. Research by routinely collected clinical data creates new knowledge which will be very much useful to the local community. As a result, the information from the registered patients' medical records was entered into an excel sheet. Co-investigators from the Global NIHR research program and Teaching Hospital-Jaffna consultants supported the continuation of research using routinely collected data. It pave the path for integration with secondary and tertiary care consultants.

• Simulated patients (13), Forum Theater (14) and reflective writing (15) have been identified as the appropriate method to continue clinical teaching. This allows medical students to become active participants in FHC activities. Stimulated patients are used to teach consultation, communication and clinical examinations skill. Forum Theater is used to illustrate the common problems in the community such as domestic violence and child abuse. All the students were asked to write reflection about the activities done during the appointment. Students are motivated to write reflection on their daily activities in WhatsApp group. Then the feedback will be given by the teachers.

Gained Knowledge

The method of facing the new global challenges without disturbing the routing clinical service delivery, medical education and research was identified (annexure).

Challenge	Solution
A. COVID 19 & service delivery	New guidelines for chronic illness management at FHC is developed Help line and tele-medicene established
B. Medical Education	New medical education teaching methods were intorduced
	1. Stimulated patient based teaching
	2. Forum theatre
	3. Reflective writing

 Research with routinely collected data was estavlished
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Our Current Status

Our journey began with only one wing (Core research team) and gradually expanded to include more wings in each step as a result of the challenges we encountered. Our wind mill now has seven wings, which include the Core research team, Academics of Faculty of Medicine-University of Jaffna, the Health Ministry of Northern Province, Public forums such as youth forums and patient welfare society, Non-government organizations such as- AHEAD trust, NICST, Friends of Manipay Hospital, Department of Psychiatry and secondary and tertiary care consultants (from Medicine, Surgery, Gyn &Obs and Radiology). While being blown by the wind, these wings turn together and work effectively as a unit to produce energy that leads to the destination.

The experiences accumulated through the journey of past ten years helped us in creating a comprehensive primary care system. Now we are towards step 3, where we are intending to transfer the knowledge gained during our journey to the rest of the Northern Province. As we believe in vision with action makes a powerful reality, we will eventually reach our destination. The current activities of FHC is summarized as below



Figure 7 – Activity summary of FHC in 2021

A final thought

Even if your vision is clear, and you can articulate a detailed destination, there are always challenges in your journey. It is the joy and journey of clearing those challenges that makes life rich and helps people feel truly accomplished when they finally reach their pinnacle of success.

We know where we were yesterday and where we are today. But we will never know where we will be and what challenges will come in our way as that is the secret of life. We can't make perfect set of plans in advance as the world is constantly changing, but we have a vision to guide us. Even if the road towards the destination is not perfect, we have each other. So let us keep our eyes on the vision and continue moving forward.



Dr .K.Sivapalan



Prof.N.Sreeharan



Senior Prof.V.Arasaratnam



Prof <u>Krish Nirantharakumar</u> Figure 8 – Mentors



Emeritus Prof. Antoinette Perera



Dr.S.Sivayokan



Figure 9 – Staff Department of Community and Family Medicine Figure

Figure 10- Staff Family Health Center

Thank you ..!!!

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Annexure Dissemination of knowledge from innovative solution

Dissemination of knowledge from 1st set of innovative solution

<u>Oration</u>

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Dissemination of knowledge from 2nd set of innovative solution

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