Integrating Principles of Modern Epidemiology, Health Promotion and Public Health Practices to Establish a Health Unit System based on Ayurveda Health Promotion

Senaka Pilapitiya

Centre for Education and Research in Complementary and Alternative Medicine,
Faculty of Medicine and Allied Sciences,
Rajarata University of Sri Lanka.
Saliyapura, Anuradhapura, Sri Lanka
Tel.: +94 25 222 7706
URL: www.rjt.ac.lk/med/index.php/complementary-and-alternative-medicine
Email: senakapilapitiya@gmail.com

Other individuals involved
Suneth Agampodi, Sisira Siribaddana, Nandani Molligoda, J.A.A.K Samarayake and Amali Perera

Duration: 2013 to present
Total cost: USD 50,000
Summary

Complimentary and alternative medicine (CAM), long an integral part of Sri Lanka’s health system, includes a range of different practices including Ayurveda, Siddha, Unani and Yakka vedakama, this latter preserved among aboriginal peoples and is a traditional/indigenous medicine unique to Sri Lanka.

In 2001, an Ayurveda Community Health Promotion Service (ACHPS) was established by the Ministry of Indigenous Medicine in Anuradhapura district targeting health promotion and community health activities based on the health unit system of the conventional medicine system in Sri Lanka, where the country is divided into more than 300 health units known as Medical Officer of Health (MOH) divisions.

A collaborative programme was started between the Anuradhapura district ACHPS and the Centre for Education and Research into Complementary and Alternative Medicine (CERCAM) of the Faculty of Medicine and Allied Sciences, Rajarata University of Sri Lanka. The activity involved an integrated training programme for all Ayurveda health promotion officers to train them in Ayurveda health promotion concepts and to use modern epidemiological principles, clinical research, health programme planning and bases for public health practice to facilitate the implementation process. The idea was to specifically identify the principals and proven concepts in Ayurveda for community-level health promotion activities, which was done by experts in Ayurveda, and then use epidemiological and public health practice principles for programme implementation, monitoring and evaluation.

This programme, which was launched in 2013 and saw 55 Ayurveda health promotion officers trained, was subject to quantitative and qualitative evaluation after one year.

The training sessions were shown to be very effective as the mindset of all those involved, as well as the programme as a whole, changed from being one that duplicated the health promotion activities of the conventional healthcare system to that of a programme initiating new approaches in community health.

Background and Justification

Ayurveda is a system of medicine that has a rich knowledge base for health promotion. It has a high cultural acceptability and could play a significant role in health promotion and disease prevention in countries such as Sri Lanka.

Being accepted and regulated by the Government of Sri Lanka and run as a parallel system to conventional medicine, its effective implementation, while integrating with modern practices of health promotion, could deliver good results to the community.
The Centre for Education and Research in Complementary and Alternative Medicine (CERCAM) is a centre in the Faculty of Medicine and Allied Sciences of Sri Lanka’s Rajarata University, established with the purpose of looking into other systems of medicine with an open mind and carrying out research and educational activities in complementary and alternative medicines.

This is the first and only such centre established in a faculty of medicine in Sri Lanka although traditional, complementary and alternative medicines are in wide use even today alongside conventional medicine. The centre has expertise in conventional medicine as well as that of Ayurveda and indigenous medicine. Understanding the value of such integration the CERCAM entered into a three-year collaboration with the Anuradhapura district Ayurveda Community Health Promotion Service (ACHPS). The ACHPS is under the direct supervision of the Ministry of Indigenous Medicine. The Anuradhapura district ACHPS was launched in 2001 as a pilot project by the Ministry of Indigenous Medicine, with the intention of creating a similar unit system to that practiced in the conventional medicine sector under the Ministry of Health.

Description

Through the collaboration between CERCAM and ACHPS, several programmes were planned to apply Ayurvedic and indigenous medicine in health promotion, while preserving their principles and holistic approach, which differ from the usual reductionist approach of conventional medicine. The intention of the pilot project was to explore the effectiveness of an Ayurveda community health promotion service in relation to the promotion of health at a community level so that, if successful, it could be implemented throughout the country.

The interventions were combined with time-tested epidemiological and public health tools for effective implementation. In order to do this, it was paramount to educate and train a number of Health Promotion Officers (HPOs) working for the ACHPS together with doctors.

The ACHPS is headed by a director and has 22 Community Medical Officers (CMOs), each being appointed to a division of the district. The director and the CMOs are Ayurvedic doctors who have graduated from university-affiliated Ayurveda and indigenous medicine institutes and who are registered with the Ayurveda medical council.

In addition, the ACHPS has 210 HPOs who function as field officers. There are several HPOs for each division working under the supervision of a Community Medical Officer (CMO).
The HPOs’ educational qualifications include the passing of the Advanced National Level examination, an exam held at the end of school education.

The absence of formal training for HPOs was a strongly-sensed deficit within the ACHPS and we took the opportunity to educate them both on the principles of health promotion in Ayurveda and indigenous medicine as well as modern epidemiological principals, clinical research, health programme planning and public health practice principles, designing a certificate course through Rajarata University that the officers could add to their educational and professional training qualifications. Training of doctors was done through workshops and designing and carrying out different activities together and by planning research within the programme.

The training of CMOs on modern principles was also carried out.

Fifty-four HPOs completed their training (Fig. 1) and were awarded their certificates by Rajarata University. They are now working within the ACHPS and the feedback from CMOs is very encouraging. Another batch of 50 HPOs is currently undergoing training.

Though there were many expectations at the start of the project, a lack of understanding on organizing and structuring such community-based health programmes together with the vacuum of knowledge in relation to some epidemiological and public health practice principles for programme implementation, monitoring and evaluation made the project less convincing. Nearly 12 years after its inception it remains confined to the

Figure 1: A group of Health Promotion Officers (HPOs) during one of their training programmes.
Anuradhapura district and its true effectiveness remains to be validated. Thus, despite its strengths, weaknesses in the delivery system have undermined the programme’s role as an effective system that could be utilized to promote the health of the community.

**Partnerships**

The project was undertaken in a partnership with the Ministry of Indigenous Medicine, the Government of Sri Lanka and other leading indigenous medicine institutions. In addition, volunteers in the geriatric care programme with non-governmental organizations such as the Lions’ Clubs assisted in the geriatric healthcare programme.

**Impact**

It was shown that a properly and carefully thought-out professional association among medical professionals belonging to different domains could deliver mutually-beneficial results while improving the state’s healthcare delivery. Currently 56 trained HPOs are working in the community.

In addition, 21 CMOs are better trained in the use of modern epidemiological principles, health programme planning and public health practice principles in their routine work. They are also trained in the education of community health volunteers.

The training of HPOs by officially getting them enrolled to follow a certificate course for community health in complementary and alternative medicine had many benefits apart from providing the necessary training. The academics that participated in training became aware of how such integration could be brought about without violating the principles of each domain and this became a novel experience for them.

It was also noted that professionals from conventional medicine started learning the principles involved in Ayurveda and were finding it interesting to explore it further. This led to more professional associations in relation to research and exploring treatment modalities for different ailments, some of which took place outside the programme.

The enthusiasm shown by the university in arranging this course showed the expectations of lay people in seeing the integration of medical systems in countries like Sri Lanka where traditional medicine still commands a considerable degree of affection and cultural acceptability.

Furthermore, this interaction was proven to be of great use when a breast cancer screening programme and an influenza outbreak response was commissioned in Anuradhapura
district with the help of the CMOs and HPOs. Though this was not among their usual duties their interaction with specialists in conventional community medicine made it feasible to use this readily available resource for preventive healthcare.

This collaboration, and the training provided during it, helped the doctors and director realise that it is important not to duplicate the work done by the Ministry of Health system and the similar structure of the conventional healthcare system which was more organized and well-established. This led the ACHPS to explore other, uncovered areas of health promotion where Ayurveda could play an important role and to the initiation of an integrated community-based geriatric healthcare programme within the collaboration programme. A pilot project has already been conducted and is proving to be effective.

Within this community-based geriatric care programme, volunteers from the community were trained on subjects such as how to prevent falls in the elderly, on what changes in the home environment need to be made in order to reduce falls and how to deliver home remedies such as the application of herbal oils and fomenting with herbal packs for aches and pains that are common in elderly people.

**Sustainability**

By entering into an official collaboration with ACHPS, we were able to build trust and mutual understanding among professionals of the mainstream and Ayurvedic/indigenous medicine sectors. This gave an assurance to the sustainability of the project such that it would not be affected by misunderstandings and incompatibilities of the two systems involved.

All the trainees were permanent government employees and the trained ones are already employed, helping to make the programme sustainable.

**Replicability**

Ayurveda CMOs are available in all districts of Sri Lanka. Therefore, based on the outcome assessment of this programme, the Ayurveda health promotion service can be implemented all over the country. Through this project patient referral among professionals in the two sectors has become acceptable to a certain extent. This can be improved at a national level. However, any country with a history of complementary and alternative medicines can follow a similar system as it is simple but effective.
Lessons Learned

Ayurveda and the indigenous system of medicine in Sri Lanka can be considered to be rich in health promotion and preventive aspects. Cultural acceptability is an added advantage that Ayurveda and indigenous medicine has in approaching the community for purposes of health promotion.

Though Ayurveda, Siddha, Unani and Sri Lankan indigenous medicine are regulated and accepted by the government, there are very minimal interactions between conventional medical professionals and providers of other forms of care. There is also hardly any coordination between the conventional healthcare system with the healthcare provided by the institutions that come under the Ministry of Indigenous Medicine.

This is further complicated by a clause of the Sri Lanka Medical Council that discourages its members from professionally associating with Ayurveda and other medical practitioners. In addition, conventional medicine professionals have a minimal knowledge of other systems of medicine and their principles. All of the above as well as some bad historical experiences in building the trust and confidence to work together have been among the main issues involved in such activities. Difficulty in understanding and appreciating different domains of medical practice is the other main issue in such interventions. In addition, the perceived fear of invasion or exploitation of indigenous medical resources by professionals and researchers in conventional medicine is another barrier that must be overcome in such collaborations.

Having CERCAM established in the Faculty of Medicine and Allied Sciences at Rajarata University of Sri Lanka was the main reason for being able to carry out this innovative programme. The mindset of the faculty to collaborate with the Ayurvedic and indigenous medicine sector while understanding the possible challenges they could face from their professional bodies added to the success of the project, as did having academics with expertise in both conventional and Ayurvedic medicine within the faculty and the freedom that was available within the faculty to take up challenges in order to improve healthcare delivery.

Having expertise in both conventional medicine and Ayurveda within CERCAM also gave the assurance that the collaborative work would not compromise the application of Ayurvedic principles at the design and implementation stages. Constant dialogue and respect for each other’s principles and practices helped build the trust among the professionals belonging to the two sectors.

Through regular discussions and workshops we overcame the lack of understanding of modern epidemiological principles, clinical research, health programme planning and
public health practice principles among community medical officers. This also helped us realise that adult education was not a difficult task when this had a direct positive effect on their work.

However, dependence on total government funding created limitations. Some training programmes for doctors and HPOs had to be abandoned due to lack of funding and the geriatric care programme met with some limitations due to inadequate resources. To overcome this, locally available resources were used, for example consultancies by the faculty staff were offered free of charge. Public participation and acceptance was greater than usual in this project.

Thus, though integration of knowledge of different medical systems could deliver better results, it needs to be done carefully while respecting the fundamentals of each system. Integration in such situations also requires careful appreciation of each system’s principles and being non-judgemental about their approaches to healthcare. Such an approach to integration requires expertise in both systems together with proper attitudes and skills. Lack of coordination and professional association among Ayurvedic and conventional medicine professionals has made it very difficult to forge an alliance for such an integration which could deliver many solid health outcomes to the community.

---

**Future Plans**

Plans for further expansion of the programme include:

- Completing the current training programme and upgrading the programme to diploma level;

- Follow-up monitoring and evaluation of the implementation of principles of epidemiology and public health in the Ayurveda community health practice;

- Training of Ayurveda doctors in public health and health promotion by offering an MSc. designed by the university (no such opportunity is currently available for Ayurveda doctors); and

- Implementing the integrated community-based geriatric care programme throughout all the districts in the area.

We have already shared the experiences with doctors of conventional medicine through discussions and presentations.