

Brief Report

The Sri Lankan Perspective of Implementing Clinical Pharmacy Services

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Abstract

Clinical Pharmacists provide pharmaceutical care to patients to ensure quality use of medicines and to improve patients' quality of life. Although clinical pharmacy services have shown medication related benefits to patients, this service has still not been formerly established in Sri Lanka. This report is on the status of developing clinical pharmacy services in Sri Lanka as perceived by an academic who has been involved in teaching, research, and in the development of clinical pharmacy services in Sri Lanka.

Keywords: Clinical pharmacy, Pharmacy education, Pharmaceutical care, Sri Lanka

Pharmaceutical care and clinical pharmacy services

Clinical pharmacists provide pharmaceutical care to patients. According to the American Society of Hospital Pharmacists, pharmaceutical care is "the direct, responsible provision of medication-related care for the purpose of achieving definite outcomes that improve a patient's quality of life" [1]. It is expected to optimise patient outcomes by working to achieve quality use of medicines [1]. The main role of a clinical pharmacist in providing pharmaceutical care is to take patient's medication history, review and reconcile medication for appropriateness, provide information to patients and other healthcare professionals, monitoring, identification, reporting of adverse drug reactions (ADR), and therapeutic drug monitoring [1].

Background to clinical pharmacy services in Sri Lanka

Clinical pharmacy services are not formalized in the state hospital setting in Sri Lanka up to date. However, the concept of clinical pharmacy services and pharmaceutical care has been introduced to pharmacy education (at degree level) in Sri Lanka since around the year 2009. Thus clinical pharmacy has been taught as a course unit

for Bachelor of Pharmacy (B.Pharm) undergraduates for over a decade now. The concept has also been translated in many ways to other pharmacists in Sri Lanka. Although not formalized, it has been urged to adopt possible aspects of pharmaceutical care in their day-to-day pharmacy practice to a possible extent. My experiences in teaching clinical pharmacy and contribution in translating the importance of clinical pharmacy services to pharmacists and pharmacy students in Sri Lanka is over ten years. Over the years, I have realized that adopting clinical pharmacy services in Sri Lanka cannot be direct and need adjustment to a great extent to suit our environment and healthcare system. These are my insights and experiences over a decade on teaching clinical pharmacy, which I believe will be useful for the betterment of the service.

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Do we need a formalized system to develop clinical pharmacy in Sri Lanka?

The clinical pharmacist is not a formalized job cadre in the Sri Lankan state sector hospitals. Some private hospitals do have a post of 'ward pharmacist', but the functionality of this post and their level of contribution in par with the definition of pharmaceutical care is unmonitored. However, the question that we need to ask at this stage of infancy is 'Do we need to formalize clinical pharmacy services to develop this area of science in Sri Lanka? Do we need to have an official post as a 'clinical pharmacist' in a hospital to deliver this care? My answer to this question is 'Yes' and 'No', which is rather a diplomatic response, and hence my explanation is as follows.

Clinical pharmacy services encompass many aspects such as taking a medication history, medication reconciliation, medication reviewing, medication counselling, and pharmacovigilance which can be done at any point of care by a pharmacist in their own capacity. Being a hospital pharmacist in ambulatory care or a community pharmacist in the community, they can deliver these services to some extent based on the resources and training they have received. Having a prescription in hand, whether the patient and other clinical data are present or not, can still be an opportunity for a pharmacist to ensure the prescription is safe and appropriate to the patient within the limitations. A pharmacist can identify unwanted medication duplications, drug-drug interactions, inappropriate doses through a 'preliminary prescription review' which would benefit the patient than not. Of course, this is not a direct match to a 'clinical review' a better-informed clinical pharmacist or doctor would perform, but it is certainly better than no review at all. Other aspects such as counselling a patient on their medication administration, identifying, and preventing an ADR need not wait for clinical pharmacy services to formalize. In fact, waiting for clinical pharmacy services to formalize in

order to deliver pharmaceutical care would be unethical on the part of a pharmacist. Although every pharmacist working in Sri Lanka are not trained in clinical pharmacy, the afore mentioned services can be delivered to a certain extent by them. Therefore, I believe pharmacists in Sri Lanka must not wait for the 'red carpet' to extend their duties to patients. This being the message we disseminate to pharmacists and pharmacy students, it is seen that many enthusiastic pharmacists in Sri Lanka have already adopted this concept to the best of their ability.

Then why should clinical pharmacy services be formalized? The first obvious reason is that formalized services are more accepted, especially among the medical profession. That would establish the system in place and become a duty rather than an added service that randomly takes place. Secondly, having no formalized system for the absorption of clinical pharmacists into the healthcare system has hindered the further development of this discipline in Sri Lanka. The basic degree in pharmacy is only a pre-requisite to be a clinical pharmacist. It is where a student would get the taste of what it's all about to decide a career in this area. To be a competent clinical pharmacist, a pharmacy graduate will require further teaching and experiential training. There were many attempts to start postgraduate courses in clinical pharmacy in Sri Lanka backed by foreign experts. Pharmacy graduates eagerly awaited this opportunity, but none materialized. The main barrier is the unavailability of a recruitment system as a clinical pharmacist to the healthcare system in Sri Lanka. None of the postgraduate courses took off as there were no takers. No student would invest in a postgraduate course without job prospects in the country. We have very limited pharmacy graduates trained in clinical pharmacy as there are no opportunities in our country to further this area of study. So, while disseminating pharmaceutical care in the best possible way permitted, the real development of

this profession will only take place through formalization.

It is not a battle of professions

Pharmacists working on establishing clinical pharmacy services in Sri Lanka should first be void of the idea that this is in pursuit of developing the pharmacy profession, as such perceptions would be unethical and selfish. Other healthcare professions who are stakeholders in this mission have not embraced the concept of clinical pharmacy services in Sri Lanka either. Frankly, the establishment of clinical pharmacy services has become a battle between professions. While the more powerful ones are holding on, and the weaker helpless, the patient who is the ultimate beneficiary continues to suffer the consequences. I have often come across instances where questions are raised on the need for clinical pharmacists, and some argue that the doctor themselves can cover this aspect. The answer to this argument is 'yes'; clinical pharmacy services can be competently covered by the doctor, but so can already delegated services such as dispensing and administering medicines. It is often forgotten that the division of roles in healthcare came about because more and more professional involvement was needed in different stages of the medication use process; prescribing, dispensing, administering, and monitoring of medicine. As more and more patients default in their medication management, the role of the pharmacist evolved to provide clinical pharmacy services as a support service for doctors to ensure medication safety among patients. The clinical pharmacist has specified professional boundaries that clearly do not overlap with doctors. Therefore, it is timely for wise healthcare professionals to take the lead to establish clinical pharmacy services in Sri Lanka, setting aside personal interests out of the equation.

Do patients really benefit from clinical pharmacy services?

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services? Or are healthcare systems in countries like Sri Lanka different to that of the West? Western countries have clear evidence to show that providing pharmaceutical care by trained pharmacists have benefited patients [2]. Every major component of providing pharmaceutical care such as taking a medication history [3], medication reconciliation [4], medication reviewing [5], medication-related counselling [6] and ADR monitoring [7] have improved medication safety among patients. Some studies in Sri Lanka have shown similar findings [8,9]. The motive is to spend more time with individual patients in relation to their medication use and have this dedicated specialist service to help patients manage their medications more effectively. However, my observation is that the healthcare system in Sri Lanka is more focused on strengthening the diagnosis and prescribing arm of healthcare provision with little emphasis on the latter processes of the medication use process such as dispensation, administration and monitoring of medication use by patients. In fact, the latter is neglected, and it is mostly assumed that the right medicine will be administered by the patient at the right time for the given period, and the intended therapeutic outcomes will be achieved. The idea that errors cannot happen is a clear indication of a poor safety culture in the healthcare system in Sri Lanka. There are ample evidences on lapses in the medication use process to justify that an additional safety net is needed to overcome this problem [11, 12, 13, 14, 15, 16]. If there are trained pharmacists to deliver clinical pharmacy services in Sri Lanka, then suppressing this process is a deprivation of human rights.

Proposed framework for implementing clinical pharmacy services in Sri Lanka

The B.Pharm graduate passing out from the university requires further training to function in the total capacity of a clinical pharmacist, especially supervised training in the ward. B.Pharm graduates passing out from state

universities are already absorbed to state hospitals every year. These graduates have had preliminary training in clinical pharmacy and should be the potential workforce when initiating clinical pharmacy services in Sri Lanka in the future. For the initial training, I propose to select a team of (about ten) enthusiastic B.Pharm graduates who are already in the government hospital service with representation from a number of teaching hospitals in the country. This first team of pharmacists to be trained as clinical pharmacists and become the pioneering local trainers of clinical pharmacy services in Sri Lanka.

The training and supervision in clinical pharmacy for this proposed team should ideally be through trained clinical pharmacists. The same outcome would not be achieved if trained by a doctor because the doctor's perspective and priorities are not identical to that of the clinical pharmacist. The clinical pharmacists' perspective is purely medication-related and the doctor's perspective is much broader and more directed towards diagnosis and management of patients. Thus, the clinical pharmacist would know their exact role, boundaries that clinical pharmacists should not overstep, and perspectives to be inculcated in the trainees. As such, the training at the beginning will have to be mediated by clinical pharmacists overseas, facilitated either by sending the team of trainees abroad or sponsoring a panel of foreign resource persons to operate in Sri Lanka. The former would be more practical as getting down resource persons for a substantial period of time may not be feasible. Suppose the team could be trained overseas for a period of six months and a further six months in their respective hospitals in Sri Lanka under the remote supervision of foreign resource persons. In that case, a substantial exposure in clinical pharmacy could be facilitated. In my experience, I have observed many overseas training opportunities provided by the state for Sri Lankan citizens in the health sector but have always felt that the true potential of this training is

not delivered back to the country. The reason has been that these overseas training opportunities are considered mere perks of the job, and the receiver of the opportunity is usually based on seniority or the 'next in line' to get overseas training. Most often, overseas training opportunities are considered rewards rather than planned, sustainable approaches for developing the health sector in Sri Lanka. The trainee returns to the country content, but little effort is made to disseminate this experience to others. The proposed training in clinical pharmacy should not follow this trend and should be planned as a 'train the trainer' program. Inputs from foreign resource persons should only be limited for the first team or two, and there onwards to be taken up by the trained local clinical pharmacists in Sri Lanka. The duty of the trained clinical pharmacists must be to supervise and train other potential graduate pharmacists in their respective hospitals for the cause as internal training teams.

Pharmacists can be absorbed to hospitals in the same manner as done now, and those with further training in clinical pharmacy could have a roster for visiting the wards in the initial stages. Upgrading pharmacists to clinical pharmacists/ward pharmacists could be incorporated into the employee promotion scheme in the hospital using stipulated criteria so that the additional training in clinical pharmacy is formalized.

There should be a good understanding between doctors and pharmacists trained in clinical pharmacy for effective execution of clinical pharmacy services with a pure intention of benefiting the patient. Although past research has found that doctors agree with most drug-related problems identified by pharmacists [17], there were instances of disagreements, especially where treatment guidelines are not specific or clear. Such disagreements could affect inter-professional relationships and disrupt the genuine goal of

clinical pharmacy services. Disagreements on drug-related problems should be discussed and resolved at routine intra-institutional doctor-pharmacy forums/meetings so that a clear direction is paved for the two professions to help each other in optimizing the therapeutic outcomes of patients.

Conclusion

Patients will benefit from an extra safety net in the medication use process and clinical pharmacists are geared for this purpose. Although pharmaceutical care can be provided to patients to some extent in the current context, formalizing clinical pharmacy services in the state healthcare system of Sri Lanka is needed for the sustainability and development of this program. The basic educational foundation for developing clinical pharmacy services in Sri Lanka already exists and must be utilized when developing this discipline. This venture of establishing clinical pharmacy services in Sri Lanka should be with pure intentions of benefiting the patient and not a battle of professions.

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