Clinical Pharmacy: A Theoretical Framework for Practice
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The assurance of quality for any system is not possible without adequate supervision. A quality assured healthcare system should not be composed of only the prescriber and patient; it must also include a supervisor. Thus, three role plays are critical to every efficient healthcare system, namely, the provider, the receiver, and the supervisor. To illustrate this position, given the circumstances that the receiver most likely would be naïve to the technicalities and procedures of healthcare, and that the provider is an imperfect being who is also susceptible to errors, negligence and opportunism, who then is to ensure that the care provided is of standard quality and efficiency? The supervisor, of course. Presently this vital role of supervision within the healthcare system is left unfilled worldwide. Consequently healthcare resources are wasted and treatments are mainly ineffective and uneconomical.

We live in the conception stage of the clinical pharmacy profession, and very typical of the time, there is no consensus as regarding the function and structure of this noble profession. There is now much debate in both academic and practice fields as to what particular role the clinical pharmacist should fill within the healthcare structure. The support seems to be stronger on the side of those who argue that clinical pharmacists ought to be accorded with some measure of authority to be able to prescribe treatments. This I think is a duplication of role much as the role of a prescriber is already sufficiently filled by other health professions. This statement by no means expresses sufficiency in terms of numbers of those professionals but the identity. My personal candid opinion on this issue is that we do not need more health professions to serve as prescribers any more. We as pharmacists are already suitably positioned both by law and education to authoritatively vet the treatments which are being discharged by the existing prescriber-professions, and with the proper orientation, we are the best suited among the health professions to provide supervision in the healthcare system. I posit that the clinical pharmacy profession should fill this supervisory role which remains vacant up to this present time. In the succeeding sections I undertake to define a theoretical basis for this position and illustrate how it could be put into practice.

Tripartite Model of the Healthcare Team
Let it be invented as the basis of our noble profession a certain tripartite model of the healthcare team. This constitutes a radical departure from the current model of the healthcare team wherein the doctor occupies a commanding position among a team of other health professions, including pharmacists. We depict the healthcare team as an equilateral triangular relationship of three distinct roles which are of equal and complementary importance, namely: the provider of healthcare, the receiver, and the quality assurance specialist.

The medical practitioner functions as the provider of healthcare services at the head of other health professions who for the purposes of this model I would describe as the allied health professions. The patient functions as the receiver of healthcare services and two reasons may be adduced to explain the inclusion of the patient in the healthcare team. Firstly, the patient is the ultimate
decision maker in any properly administered health system; another facet of sharp contradiction between the current model of the healthcare team and the tripartite model we are now discussing. It is incontrovertible that the authority belongs to the patient both to seek healthcare services and to choose a particular treatment option, and that healthcare professionals should only function to guide the patient to choose and then deliver the selected treatment. The patient should never be considered as an unquestioning recipient of healthcare services. Secondly, the success of every healthcare effort is totally dependent on the cooperation of the patient. If the patient is made to appreciate his/her vital role as team-player in healthcare there is the higher prospect of maximum cooperation and adherence to the instructions of healthcare professionals.

In this model the clinical pharmacist functions as the quality assurance specialist, namely, the umpire. The idea of umpire is deemed very appropriate in comparison to the word referee who carries similar connotations in that there is some bias in the work of the former. The clinical pharmacist necessarily should exist to function for the benefit of the patient and in the interest of the healthcare system. As medical practice is made up of much technical language and procedures of which the patient most likely would be ignorant, it is very necessary for there to be an agency who may function somewhat as the patient’s advocate to stand by the patient, carry the latter through the healthcare process, and to ensure that good quality and economical care is provided. This is the professional function we propose for the clinical pharmacist.

The allied health professions include all other known professions besides the medical profession and clinical pharmacy. To mention a few, allied health professionals as per this model under consideration include nurses, radiologists, biomedical scientists, laboratory technicians, ultrasonographers, dieticians, physiotherapists, and anaesthetists. Notably, pharmacists who practice the traditional pharmacy profession which is in current general acceptance are included among allied health professionals. As these professionals mainly perform in response to the instructions of the medical practitioner we consider that these interact with the patient in an indirect manner. This explains why in the tripartite model the allied health professions are placed only tangential to the medical profession and not in direct relationship to the patient. In contrast to the traditional pharmacist who follows the instructions of the medical practitioner the clinical pharmacist functions in an independent capacity and is not subject to the medical practitioner. The latter two are both hires of the patient.

**Elements of Pharmacoprudence**

Let it be introduced into the lexicon of healthcare the term “pharmacoprudence” to describe the job function of the clinical pharmacist. It emanates from the realization that the role which we seek to establish for the clinical pharmacist is very much similar to that of the legal practitioner. And as is jurisprudence so is pharmacoprudence. In very few words I may define pharmacoprudence as the science and practice of the rational, efficient, efficacious and economical utilization of therapeutic agents. We associate pharmacoprudence with the broader coverage of all therapeutic agents in contrast to the limited focus of drugs alone. Further to the point pharmacoprudence is the professional domain of the clinical pharmacist.

The profession of clinical pharmacy may be practiced both within the hospital setting and the private sector, although there is the business facet as well in the latter case. But in whatever field of practice wherein the clinical pharmacist may be found there should be uncompromising autonomy of practice. That is, the clinical pharmacist does not perform by the instructions of any other health profession. I have the opinion, that so as to avoid attrition at the workplace, clinical pharmacy is best practiced in a private business office.

Pharmacoprudence, the job function of the clinical pharmacist, embodies several interrelated activities which include the following:

1. Pharmacoeconomic evaluation of therapeutic agents. The clinical pharmacist follows the global scholarly biomedical literature in the medical field(s) of his/her specialization. The objective is to keep updated with the emerging trends in the diagnosis and treatment, as well as the issues in the field(s) of his/her specialization. At predetermined intervals the clinical pharmacist prepares a review literature to be circulated among the healthcare facilities he/she works with.

2. Maintenance of managed health records (MHRs) for individual clients. The clinical pharmacist should maintain MHRs for his/her clients. These are electronic forms of patients’ medical folders which are organized and stored in a manner as to enable faster information retrieval. It is a difficult task to access pertinent information from the conventional patients medical folders in which documents vital information are scattered in chronological order. In the MHRs such pieces of
information are stored in a classified structure. The breadth of coverage of the MHR should be wide enough for it to serve as a comprehensive health record of the client.

3. Performance of clinical audits on population-wide and individual basis. Clinical auditing is the process of measuring the degree of compliance between any prescribed treatment and generally accepted treatment protocols. Clinical audits are the main instruments for quality assurance of the healthcare system. Although international protocols are often employed local protocols may be developed through the leadership of the clinical pharmacist and are then submitted for peer review. As a result of clinical auditing the clinical pharmacist institutes corrective measures to address the points of deviation of the prescribed treatment from the standard protocols.

4. Execution of clinical trials. The clinical pharmacist is also a research scientist and would frequently have to initiate or participate in clinical trials. The quest for superior therapeutic agents is ever imperative and necessitates that the clinical pharmacist should be ready to experiment with therapeutic agents to determine new ways of treating diseases.

5. Training and education of other healthcare staff and the general public. The clinical pharmacist is a health educator and trainer. A regular program should be developed whereby the clinical pharmacist may disseminate the knowledge acquired through his/her own studies to other healthcare professions, the academic community, and the general public. The practice office of the clinical pharmacist could serve as a platform for apprenticeship and training of other people in pharmacoprudence. A clinical pharmacist could very successfully establish a continuous succession of clinical pharmacy practice by using this approach.

History of Professions
I should point out that no existing profession is of a natural origin; they all began as the conceptions of men, were inaugurated, and thereafter nurtured to maturity. This is the tortuous trajectory which our noble profession would have to follow. A few discussions I have had with colleague pharmacists have hinted to me that the theoretical framework discussed here would meet with pessimistic reception from the very people it is meant to stimulate. There is uncertainty whether the tripartite model would be acceptable to the other health professions. Some advised that we pursue the approach of dialogue with other stakeholders of the healthcare system to reach consensus. But do we have to beg for permission from other people to practice our profession? Must we seek the approval of other health professions to practice clinical pharmacy in the best way that we think it should be practiced? It is a plain fact that clinical pharmacy is our own profession and we alone, and none other, have the ethical authority to determine its identity and course to follow. The professions are conceived by ideas, born by the fellowship of people, and are nurtured through practice. This theoretical framework has been conceived for the clinical pharmacy profession. The next important step is the organization of all colleagues who subscribe to these propositions. We would not beg the established system to accept our model; we would fix the model into it.

The public is the ultimate authority in every enterprise; it is that which the public would accept that matters and not the preferences of other health professions. By embarking on robust social marketing campaigns we are sure to lead the public to appreciate the merits and benefits of the clinical pharmacy profession.

Our Opportunity
A dichotomy could still be maintained between traditional pharmacy practice and clinical pharmacy. It would serve no useful purpose to clinical pharmacy to dissolve the traditional pharmacy profession. As allied health professionals, traditional pharmacy practice should continue to perform its current functions such as pharmaceutical stock management, dispensing of medicines, preparations of admixtures and extemporaneous products, et cetera. A person who seeks to pursue a career in pharmacy practice should have the option between traditional pharmacy and clinical pharmacy.

A somewhat odd pair of factors combine to produce an ironic advantage for our course. On the one hand the pharmacist is in possession of a very extensive knowledge on the applications of therapeutic agents; on the other hand we are not given the legal mandate to prescribe treatments. These two seemingly opposing factors place the pharmacist in a unique position among the health professions. The pharmacist is the best qualified professional to vet the treatments that are prescribed by the prescriber-professions. This I think constitutes a very good opportunity for launching the clinical pharmacy profession. Instead of arguing for authority as prescribers we should express optimism and make the available provisions work to our advantage.