

## An Open Letter to All Clinical Pharmacists: 2016 Pharmaceutical Care, Medical Laboratory, Nuclear Medicine and Imaging

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Mauro Luisetto<sup>1</sup>, Behzad Nili-Ahmadabadi<sup>2</sup>

1. Mauro Luisetto, *PharmD/PhD*: Via Stradella, 26, Piacenza, ER, Italy, maurolu65@gmail.com
2. Behzad Nili-Ahmadabadi, *PharmD*: Nano Drug Delivery, behznili@nanodd.com, Chapel Hill NC 27514, USA, +1 (919) 617-NANO

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**Abstract.** The purpose of this study is to examine and discuss the advantages and potential roles played by clinical pharmacists as steady members of a medical team with physicians, using the data provided by medical laboratory and imaging, as tools to monitor the therapy with a goal of improving clinical outcomes of the patient, leading to a better containment and safety.

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**Keywords:** Pharmaceutical Care, Clinical Pharmacist, Imaging, Medical Laboratory, Hospital Settings, Medication Cost, Clinical Outcomes, Innovative Therapy

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### Introduction

Clinical pharmacy, pharmaceutical care, medication therapy management (MTM), ward pharmacy, and consultant pharmacist service can be utilized as helpful tools in today's world of cognitive services. This participation in multidisciplinary medical team certainly improves some clinical outcomes. This creates an opportunity for both medical authorities and patients to efficiently contain costs as far as drugs and medical devices. With a growing number of new drugs, medical and diagnostic procedures added to even more complex cures and multitherapy there is a crucial need of clinical pharmacist service.

Reduction of medication therapy errors is not only needed but also demanded by both patients and health authorities and government. Multiprofessional healthcare team is the right keyword in today health care systems.

A clinical pharmacist today contributes in oncology, toxicology, emergency medicine, nuclear medicine, infectious diseases, nephrology, nutrition service and others. In order to create a team in an efficient fashion, and assess pharmacological therapy related to new biological agents, the pharmacists must go up-to-date their knowledge, so they will be prepared to use the data provided by imaging, medical laboratory, biochemistry, molecular biology, genetics, and immunohistochemistry departments.

The presence of clinical pharmacists in medical teams represents the key and nowadays they make a crucial difference in the management of new innovative pharmacological therapeutics, especially when there is a great necessity of cost containment.

This is not limited just to hospitals; the clinical pharmacy can serve patients, as consultant homecare doctor, out of the hospital, settings. This will, very conveniently, turn into a great relief to patients and their needs, both in economic and comfort aspects, when hospitalization is not necessary.

A consultant pharmacist for patient in the complex world of drugs therapies can be a focal point in the different medical specialty and in the complex health care world.

Adding up that specific clinical pharmacist pharmaceutical chemistry and pharmacological expertise to his/her clinical service, you'll have a noticeable change in improving the patients' clinical outcomes, as far as health and quality of healing.

The hospital and the state also will greatly benefit from such combinatorial system. In fact, a thorough economic monitoring shows drastic therapy costs reduction.

## Materials and Methods

This work is dedicated to compare the results after observing and analyzing some relevant biomedical literature in function of clinical pharmacist presence in the medical team and outline the obtained results as follows:

1. Bond C.A, et al. in 2007 clinical pharmacy service, pharmacy staffing, and hospital mortality rates. "In seven hospitals, clinical pharmacy service reduces mortality rates." In a significant way. <sup>1</sup>
2. Chisholm et al. 2010 in "Pharmacist's effect as team members on patient care: systematic review and meta-analyses": "pharmacists provided direct patient care has favorable effects across various patient outcomes, health care settings, and disease states. (significant  $p < 0,005$ ). <sup>2</sup>
3. 2015 Pharmacist cognitive service and pharmaceutical care: today and tomorrow outlook UKJPB M Luisetto et al UK J Pharm & Biosci, 2015: 3(6); 71

*"The goal of this article is to improve the pharmaceutical care application in countries with an advanced healthcare system in order to provide more rational drug therapy to patients. When this is not possible, it would be a good idea using pharmaceutical care, in particular populations such as: severe disease, critically ill, patients with multiple illnesses, transplants, immunosuppression, oncology or other serious conditions, at least when the treatments cost a lot." And "In these studies, we observe a general positive influence of pharmacist's presence in the medical team also in different clinical outcomes."* <sup>3</sup>

## Results

What we have observed in these studies was an overall positive impact of the presence of pharmacist in medical teams which resulted in significant enhancement in different clinical and economic outcomes.

## Discussions

Based on the results of this observational study, the observed achievements were due to medical laboratory and imaging knowledge and expertise of the clinical pharmacist, as part of the team in a hospital setting.<sup>4,5</sup>

We have noticed that such imaging and medical laboratory expertise of the clinical pharmacist has resulted in a significant impact on therapy and its monitoring

## Conclusions

For the sake of patients' safety and health as well as cost reduction and for clinical pharmaceutical care purposes, it is incumbent upon the hospitals to engage and demand an active role from clinical pharmacists, not limited to but especially in fields such as medical laboratory and imaging.

Isn't time for the health authorities, including hospitals, to utilize the expertise of clinical pharmacists when, especially it comes to the reduction the patients' life threatening risks, enhancing clinical outcomes as well as cost savings, when there is such an exponential rise of the innovative treatments prices?

**Conflicts of Interest:** None

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