

# Strategic Assessment of Challenges to Clinical Pharmacists in Pakistan and their Historical Relationship with Physicians

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## Abstract

This study through light on actual role of Clinical Pharmacists and their relationships with Physicians as well as challenges to Clinical Pharmacists in Pakistan. Pharmacy is a patient oriented profession and a Pharmacist should be clinically smart and strong, the relation between Physician and Pharmacist of many decades but unfortunately this area of Pharmacist is not meeting the modern challenges of clinical practice, in Pakistan Pharmacy. Strategies includes curricula modification, incorporation of “7 stars Pharmacist qualities recommended by WHO”, more focus on practical knowledge rather than theoretical, vacancies announcement, training regarding prescription and paid one year internship like other countries in order to stabilize health care team and to provide rational drugs to the patient to improve both health and wealth.

**Key words:** Clinical Pharmacy, Clinical Pharmacist, Physician, Health care triangle, World Health Organization, Pakistan.

## INTRODUCTION

The stream of clinical pharmacy practice first time introduced in United States in 1960s and other relevant countries and then flow towards the other countries as per need of the health care team in a similar way in this drought the health care team of Pakistan was also near to dried but the water flow from U.S in order to stabilize the health care triangle.<sup>[1,2]</sup> Clinical Pharmacist acts as a guide to provide safe, effective and rational therapy as well as to clinicians in order to provide modern drugs related problems as well as quality of life to patients added by International Pharmaceutical Federation.<sup>[2]</sup> Provision of drug therapy without competent pharmacist is impossible and incomplete.<sup>[3]</sup> Nowadays paradigm shift of pharmacy practice upgraded from dispensing to clinical events and provision of Pharmaceutical care, this trend is in neonatal stage in India, Pakistan, Bangladesh and some other countries.<sup>[4]</sup> Advanced definition of Clinical Pharmacy is combine liaison between physician and pharmacist, in which clinical pharmacist prescribe medications.<sup>[4]</sup> The pharmacy profession upgraded via paradigm shift from products oriented practice to patient oriented this is also called Pharmaceutical care.<sup>[5]</sup> Clinical Pharmacy has expands the role of pharmacist globally from traditional practice dispensing to pharmaceutical care and direct patient involvement and consultation to other staff.<sup>[1]</sup> (Figure 1).

The annual graduation rate of Pakistani pharmacists is almost 2587, out of these half of graduates with degree Doctor of Pharmacy involved in Pharmaceutical industries only one fourth percent pharmacists are participated in hospital and community pharmacies and clinical pharmacy set up which is unable to raise their head due to modern challenges and barriers that's why health care team is not successful and medication errors are increasing day by day ultimately the loss of therapy will takes place as well as loss of both patient health and wealth, due to above reasons unfortunately 90% these competent pharmacists building the health care

teams of foreign countries<sup>[3,6]</sup> Due to lack of well developed, standardized guidelines based practice with lack of correct model of prescribing.<sup>[3]</sup>

## Historical background

The relationship between physician and pharmacist of many decades, the Pharmacy is oldest field from the Greek time the “Asclepius” was the physician he choose and assigned the duty for compounding to a girl Pharmacist “Hygeia”, in this time she was called Apothecary the new name is Pharmacist, this indicates the relation of Pharmacist with Physician, also in Latin and Roman, but the link was not for long and finally in Arabian influence this trend of practice changed and separated both from each other in 8<sup>th</sup> century then in 9<sup>th</sup>, but after few years one American Pharmacist Benjamin Franklin called himself in 1683 as a competent health professional thus this confidence open the promotion doors for the Pharmacists. The first Pharmacy degree program was launched in Manchester University in Europe in 1904, the American preliminary initiated the patient care and clinical practice and the first degree program was B.Pharm thus American converted into Pharm.D thus called them doctors and started practices. That's why they are considered as a core indicator. Then the program was started in subcontinent and the first Pharmacy was introduced in Gujarat by Sheikh Nabi Bakhsh in 1863. In Pakistan the Pharmacy degree was commenced from Punjab University in 1948 as a B.Pharm, their curriculum in this time was wholly concerned with manufacturing of drugs but in 2004 the public felt the need of Pharmacists for patient care and clinical practice thus B.Pharm converted into Pharm.D but unavailability of facilities were everywhere from curriculum design, faculty, to prescription. In developed countries the Pharmacists fill the prescription of drugs and if they caste or put the name doctor behind them then doctor background should be provided completely to manage the patients situation from minor to



Figure 1: Paradigm shift in world of Pharmacy practice.

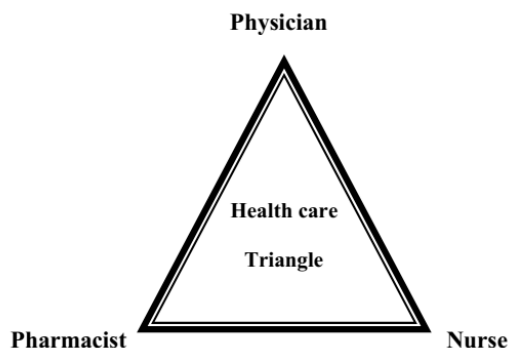


Figure 2: Health care team members.

major problems, but in Pakistan this is failure. The relationship between Pharmacist, Physician and nurse existed in triangle and every angle of triangle has their own importance, if one of them is deficient then health care triangle is incomplete.<sup>[7,8]</sup> (Figure 2)

In this article Clinical orientation of Pharmacists checked, indeed of the 5 years education with holding degree of Doctor of Pharmacy are still facing lack of direct patient involvement, instead of 2 years Clinical Pharmacy and Pharmacology and Therapeutics they are just considered as a hospital Pharmacist the NDP mandate one Pharmacists per 50 beds, according to the survey and observations this criteria is not fulfilled.

### Strategies

- Curriculum should be clinically smart and strong in order to introduce Clinical competent Pharmacists, mean competency based curriculum is required.
- With incorporation of WHO recommended “Seven and nine stars Qualities” includes caregiver, leader, learner long life, communicator, teacher, decision maker, manager and additional are research and pharmacist.<sup>[9,11]</sup>
- It is well known that the introducer of this field credit goes to U.S and U.K then their standards should be followed where Pharmacists prescribing independently.<sup>[12]</sup>
- Enormous government vacancies in hospitals about clinical pharmacists should be announced and Training is required regarding prescriptions because in U.S nowadays most of the pharmacists are independent prescribers rather than dependent.<sup>[13,14]</sup>
- One year paid internship in hospitals as recommended by other countries.<sup>[14,15]</sup>

To facilitate, motivate and encourage the pharmacists regarding their field clinical pharmacy in order to stabilize the health care team triangle to provide standard rational therapy to the patients to improve both health and wealth of the patients as recommended by World Health Organization. If these challenges fulfill there will be standard Pharmacists and will develop disease free Pakistan.

### DISCUSSION

Seven stars qualities of Pharmacists also insists by World Health Organization as well as two other recommended by Sam and Purasuraman are research and pharmacist.<sup>[9,10]</sup> Maqbool conducted the study regarding pharmacists independent prescribing this practice is on pinnacle in United Kingdom as well as in United States.<sup>[2]</sup> Graziano *et al.* 2013 articulated that Pharmacists can effectively decrease the medication errors in the absence of Pharmacists errors were (95%) and decreased to (47%) by hiring Pharmacists in hospital. They implemented pharmacists in health care team.<sup>[16]</sup> World Health Organization documented that (50%) patients fail to take correct therapy due to lack of awareness about their medications and remaining half is due to medication errors thus net zero therapeutic effect.<sup>[17,18]</sup> Pharmacist’s consultations can effectively decrease iatrogenic diseases and polypharmacy.<sup>[19]</sup> Ahmad *et al.* 2018, insists the presence of pharmacists round the clock with full day and night duty in order to effectively reduce patients complaints and provide health efficiently.<sup>[20]</sup> In Ethiopia study conducted by Berha *et al.* 2018 of 2000 patients, in which they found extensive prescription errors and recommended the presence of clinical pharmacists to improve the rational WHO recommended therapy. They also focused on pharmacists orientations to patient care rather old traditional products oriented practice.<sup>[21]</sup> Bond *et al.* 2006, articulated study from 587 U.S hospitals where adequate clinical pharmacists involved and effectively decreased the adverse effects in half in comparison to original.<sup>[22]</sup> For this purpose studies conducted in India and Brazil with same aims and objectives to provide positive outcomes to patients in both health and wealth.<sup>[2]</sup>

### CONCLUSION

Pharmacists are considered fragile in the health care team triangle relevant to clinical Pharmacy, they are the hearts of the health team and enormous difficulties faced by them in their homeland like lack of job opportunities, independent prescribing, lack of competency based curriculum, trainings and paid internship due to these reasons 90% pharmacists leaving their homeland. This article focused to provide them their rights in order to stabilize the health care team and to provide rational therapy to the patients.

### CONFLICT OF INTEREST

The authors declare no Conflicts of interest.

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None

### ABBREVIATIONS USED

**Pharm.D:** Doctor of Pharmacy; **B.Pharm:** Bachelor of Pharmacy; **WHO:** World Health Organization; **NDP:** National Drug Policy; **U.K:** United Kingdom; **U.S:** United States.

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