

Opinion

Clinical Trials Involving Pharmacists in Pakistan's Healthcare System: A Leap from Paper to Practice

Atta Abbas ^{1,2,3,*} and Nabeel Khan ²

¹ Department of Pharmacy Practice, Faculty of Pharmacy, Ziauddin University, Karachi, Sindh 75600, Pakistan

² Department of Pharmacy, Health and Well Being, Faculty of Applied Sciences, University of Sunderland, England SR1 3SD, UK; E-Mail: bg48mz@student.sunderland.ac.uk

³ Department of Pharmacy, Clifton Hospital, Karachi, Sindh 75600, Pakistan

* Author to whom correspondence should be addressed; E-Mail: bg33bd@student.sunderland.ac.uk; Tel.: +92-32-1264-3077.

Received: 12 July 2014; in revised form: 9 September 2014 / Accepted: 10 September 2014 /

Published: 16 September 2014

Abstract: The inclusion of pharmacists in the healthcare system of a developing country like Pakistan has always been a subject of debate among the healthcare professionals (HCPs), especially physicians, who have long ruled the healthcare system alone and who have had a long-held position of supremacy. The common argument against the inclusion of pharmacists is the dynamics of the healthcare system, and patients being physician oriented, hence, consider the inclusion of pharmacists as no good. Although the trend of defiance is changing, it is worthwhile mentioning here that the concept of the inclusion of pharmacist was implemented in developed countries by an evidence-based approach, *i.e.*, to actually involve pharmacists in the disease state management of a patient and conducting a trial. This opinion calls for the same to be implemented in a developing country like Pakistan to evaluate its significance.

Keywords: clinical trials; pharmacists; clinical pharmacists; healthcare professionals (HCPs); Pakistan

1. Introduction

Pharmacists and their activities have always been a subject of strong discussion among healthcare professionals (HCPs) in developing countries that are implementing quality pharmaceutical care in their healthcare system. Countries, such as Pakistan, where the profession of clinical pharmacy and pharmacy practice in general are rapidly evolving, the inclusion of pharmacists in the past has always been viewed in a wary manner by the health, as well as the academic sector [1,2]. One of the major reasons normally given against this novel concept is the dynamics of the healthcare system and the mind-set of patients being physician oriented [3]. Moreover, physicians also assume pharmacists to be a threat to their job security [4]. However, the situation is rapidly changing, and the majority of HCPs agree that the benefits of the inclusion of qualified clinical pharmacists are numerous [5]. The development process is slow, and progressive changes need a bit of time to be implemented. Currently, the situation of Pakistan in the context of pharmacy practice is between recognition of the potential of clinical pharmacy and its full-fledged service execution. The authorities have taken early steps in its development stage and, at present, are dealing with the aforesaid issues with success, now eyeing the concept of an evidence-based approach, as implemented in developed countries.

2. Discussion

In developed countries where the decision making process is always subjected to basis of evidence, a number of clinical trials have been conducted involving pharmacists in the disease state management of patients, evaluated by means of desirable health indicators or outcomes set by various clinical guidelines [6,7]. The aim of this opinion is to highlight the fact that the same concept of the evidence-based model implemented in developed countries can be applied in developing countries, like Pakistan, to verify the significance of recently-introduced clinical pharmacists and their services, which is currently in discussion among the health authorities of Pakistan.

Referring to the point of perceiving clinical pharmacist as a threat to prescribers and changing the mind-set of prescriber-oriented patients, it is worthwhile to mention that the healthcare system of the country has long struggled to counter health problems with only prescribers recognized as the sole work force. The authorities have recognized this, and the trend is now changing [1,5]. The re-structuring and up-grading of the pharmacy curriculum, as well as the creation of clinical pharmacist jobs in the country are the steps that have already been taken by the health authorities [8–10].

Furthermore, unlike the past, the majority of HCPs more openly acknowledge and appreciate the role a clinical pharmacist can play. It is hoped that with the inclusion of clinical pharmacists and the support from the HCPs of the country, the mind-set of patients can be changed over time. This approach has also been observed to work in the right direction in studies conducted recently [11].

It can be hoped that this continuing trend of the empowerment of clinical pharmacist will help them become acquainted with the situation. This can also be further improved by the implementation of the evidence-based approach to highlight their significance in the disease state management of patients. This opinion suggests that progress could be achieved by the involvement of clinical pharmacists in clinical trials of patients.

In the region, a similar model was applied in China, where the significance of clinical pharmacists was evaluated by means of trials and by witnessing their role in the particular disease state management of patients [12]. Similar trials were also conducted in India, where the role of pharmacist's counselling was evaluated [13]; however, Pakistan is poised on the verge of recognizing the importance of clinical pharmacists in this case. The pharmacy profession in the country is still struggling to have its full potential recognized, and together, the pharmaco-political situation of the healthcare system of Pakistan and its inclination towards physicians is a hurdle in this process of acknowledgment [14]. The authorities dealing with the aforementioned issues need to address and initiate an evidence-based approach in evaluating the significance of clinical pharmacists in the country, as this would complement the efforts made thus far. Moreover, it has been observed that academicians and HCPs in Pakistan are joining hands and calling for an initiation of the evidence-based approach, as well. This is a new trend, as it is being witnessed for the very first time in the country.

Keeping in view the social and healthcare dynamics of the country, the reason for this step is the belief of the HCPs that this evidence-based approach in highlighting the importance of pharmacist is the need of the hour. To prove the clinical significance of clinical pharmacists, this step needs to be taken, as the prerequisite milestones, such as the recognition of the profession by the health authorities, over-hauling of the pharmacy curriculum by educational authorities and the goal of required support from the HCPs, have already been accomplished. The clinical trials thus conducted will yield quality evidence-based information, which will ensure the confidence over the long run with regard to pharmacists and their role in disease state management [15].

3. Conclusions

Clinical trials involving clinical pharmacists will verify their significance in the healthcare system of Pakistan and pave the way toward the recognition of their role in the disease state management of patients. This evidence-based model will also serve as a confirmation of their importance in the health-care system of the country and help to inch closer toward realizing the dream of a healthier society.

Author Contributions

Atta Abbas generated the opinion which was later assisted by Nabeel Khan. The evidence from different countries was gathered and discussed by Nabeel Khan and from Pakistan by Atta Abbas. The manuscript was written and revised by the authors. Moreover, both authors read and approved the final manuscript.

Conflicts of Interest

The authors declare that no conflict of interests exists.

References

1. Abbas, A.; McGarry, K. *Polypharmacy in Pakistan*; Lap Lambert Academic Publishing: Saarbrücken, Germany, 2014.

2. Abbas, A. The catch-22 of pharmacy practice in Pakistan's pharmacy education. *Pharmacy* **2014**, *3*, 202–204.
3. Gera, N. Pakistan's Health care system under structural adjustments. *Lahore J. Econ.* **2003**, *8*, 65–81.
4. Adnan, S.; Tanwir, S.; Abbas, A.; Beg, A.E.; Sabah, A.; Safdar, H.; Moin, M.; Fatima, R.; Mobeen, K.; Shams, M. Perception of physicians regarding patient counselling by pharmacist: A blend of quantitative and qualitative insight. *Int. J. Pharm. Ther.* **2014**, *5*, 117–121.
5. Abbas, A. Perceptions of Health care professionals regarding pharmacist's interventions to reduce polypharmacy: A survey of Pakistan. Master's Thesis, University of Sunderland, England, UK, 3 October 2013.
6. Murray, M.D.; Young, J.; Hoke, S.; Tu, W.; Weiner, M.; Morrow, D.; Stroupe, K.T.; Wu, J.; Clark, D.; Smith, F.; *et al.* Pharmacist Intervention to Improve Medication Adherence in Heart Failure: A Randomized Trial. *Ann. Intern. Med.* **2007**, *146*, 714–725.
7. Wu, J.Y.F.; Leung, W.Y.S.; Chang, S.; Benjamin, L.; Benny, Z.; Tong, P.C.Y.; Chan, J.C.N. Effectiveness of telephone counseling by a pharmacist in reducing mortality in patients receiving polypharmacy: Randomized controlled trial. *BMJ* **2006**, *333*, 522–525.
8. Wu, Y.P.; Yan, Q. Considerations on the Working Pattern of Clinical Pharmacists in Participating in Clinical Medicine Treatment. *China Pharm.* **2008**, *20*, Article 95.
9. Pharmacy Council of Pakistan. Doctor of Pharmacy Degree Course Regulations. Available online: <http://www.pharmacycouncil.org.pk/doc/PCP%20Regulations%20for%20Pharm.D%20Program.doc> (accessed on 20 July 2014).
10. Pakistan Today. LHC allows PPSC to finalise new pharmacists' appointments. Available online: <http://www.pakistantoday.com.pk/2011/11/25/city/lahore/lhc-allows-ppsc-to-finalise-new-pharmacists%E2%80%99appointments/> (accessed on 12 August 2005).
11. Abbas, A. Perceptions of patients' care givers regarding clinical pharmacists and their practice. **2014**, unpublished work.
12. Adepu, R.; Rasheed, A.; Nagavi, B.G. Effect of patient counseling on quality of life in type-2 diabetes mellitus patients in two selected South Indian community pharmacies. A study. *Indian J. Pharm. Sci.* **2007**, *69*, 519–524.
13. Pakistan Today. Pharmacists demands role in policy making. Available online: <http://www.pakistantoday.com.pk/2012/04/22/city/islamabad/pharmacists-demand-role-in-policy-making/> (accessed on 22 April 2012).
14. Pakistan Today. Plight of pharmacists. Available online: <http://www.pakistantoday.com.pk/2012/06/14/comment/editors-mail/plight-of-pharmacists/> (accessed on 12 June 2012).
15. The News. Towards an action plan for development of pharmacy services. Available online: <http://www.thenews.com.pk/Todays-News-6-249563-Towards-an-action-plan-for-development> (accessed on 14 May 2014).