

Impact of Clinical Pharmacists in Healthcare Management

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Available online at: www.xournals.com

Received 4th September 2018 | Revised 25th October 2018 | Accepted 30th December 2018

Abstract:

Acknowledgment of new diseases in recent decades gave rise to the invention and recognition of new drugs material and methods and hence the significance of clinical pharmacy in Medical and Healthcare came into existence. The apprehension of crucial health care and supplying medical support to all of those who are sick has become the matter of high interest of many medical organizations, the non-governmental organization as well as suppliers of healthcare products including medical pharmacists due to many factors. With the current scenario of the scarcity of medical need, it is now a well-known fact that need of pharmacists to deliver basic as well as sophisticated along with traditional and sometimes unconventional requirement with the collaboration of paramedics and other field has become vital. This paper has outlined the importance and impact of association of clinical pharmacists in field work and specialized team in certain cases and in varied scenarios.

Keywords: *Clinical Pharmacy, Collaboration, Healthcare, Management, Pharmacists.*

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Introduction

The practice of clinical pharmacy involves face-to-face interaction between pharmacists with patients. Healthcare management and system is well established in countries that are developed if compared to developing nations. Clinical pharmacists deliver chief part in the care of patients along with the evaluation of the patient's reviewing patients' medications, monitoring of patients' therapy, and involvement in laying down to decisions on an individual level as well as within mutual healthcare groups or teams. The reimbursement of the practice of 'clinical pharmacy' has been remarkably established in the last 2-3 decades. There have been various research information that demonstrates the efficacy and usefulness of 'Clinical Pharmacists' in categorizing and determining problems regarding 'drug therapy', ambulation issues, cardio-vascular treatment etc. and in civilizing patients' clinical result together with diminution in medication errors, adverse drug events, period of hospitalization and mortality rates (Auta, 2002). Even if there are plenty of small recognition to this field and its personnel, the faith in civil from patients, parents etc. has yet to be entirely gained. Lacking behind in gaining trust in people is due to varied of reasons like the public and the health vacationer's insight and awareness of pharmacists as deficient in professionalism, commercial or even sometimes political strain on community pharmacies, and need of enforcement of the convention prevailing practice of pharmacy within both the community and hospitals (Abduelkarem, 2014).

According to **Dobish**, as stated in his article "Expanding the role of clinical pharmacists in community oncology practice" in which whole assessment was conducted at the Jack Ady Cancer Clinic, that hospitals of "Ambulatory Cancer" needs to be more dynamic and well-organized because of the increment in fulfilling the need of care services for cancer patients. Inadequate percentage of Oncologists reflects that vocational from other healthcare services need to be efficient and work more with packed possibilities which might empower Oncologists to an emphasis on the job that only they can commence. When it comes to multifaceted squads from the communal background, a pharmacist from oncology grounds have broader possibilities to undertake a major role in the care of the patient. The paper studied the model plan which took in Alberta at "Jack Ady Cancer

Clinic (JACC)". The methods included were- face-to-face communication and incorporation of the team with patients. The chief motto of the research was to observe and amend the outcome of Phenergan for patients experiencing chemotherapy in cancer treatment. The research was continued for one year without any alteration in the scheduled strategy which showed that "chemotherapy-induced nausea and vomiting (CINV)" was reduced to a remarkable extent when dealt with under a different pharmacist. This positive magnitude in the study led to observe the amplified role of pharmacists through analysis of work-load and few other parameters. Outcomes showed sturdily sustained the welfares of an extended part in service of clinical pharmacy.

Also in other paper of **Fairbanks** in his paper- "Clinical Pharmacists in Emergency Medicine", has tried to understand and elaborate the necessity of scheme for an "Emergency Pharmacist (E.Ph.)". Through the study conducted, it was concluded that programme of E.Ph. was quite operative and delivers efficiently regarding the resources and information regarding amendment that must be made to enhance the scheme and can further be used by medical bodies like hospital and medical institutes etc. that can be used by hospitals considering the implementation of an E.Ph. Program. The progress in the "Emergency Department (ED)" is the consequence of the exclusive environment of clinical ED. The key objective of the E.Ph. The program was to reduce the hazards or perils occurring from contrary measures as well as to lower the budget effect. E.Ph. program deals with a diverse workforce from the ED so as to advance medical care and to afford "Pharmacologic Information" to the team. Over all this paper conveys validation of how worthy E.Ph. Programme is. It further has discussed through aspect and elemental information of E.Ph. and its key role when is elevated for the safety of the patient in ED.

Services provided by Clinical Pharmacist

Clinical pharmacist delivers various kinds of services which basically fall under three kinds of service category. These categories and their respective services that pharmacists tend to deliver are as follows:-

Patient-Specific Services

- Patent their education

- Drug interaction screening
- Drug therapy monitoring
- Drug and disease management
- Pharmacogenetics
- Drug information
- Pharmacokinetic/Pharmacodynamic dosing
- Collaborative practice agreement

Facility-Specific Services

- Protocol, guideline and policy development and review
- Research
- Core measure and quality management initiative
- Formulary management and financial stewardship
- Medication safety

Global Services

- Governmental and societal committees and agencies
- Societal guideline and policy development
- Legal consultation
- Public health initiative (Dunn, 2015)

Ahead of recognized educational and medical training, in order to get enrolled to pharmacy program, the system makes sure that each candidate must have met the least standards of quality through certification. This setting at preliminary level sets the quality standard for all in equivalent proportion and the quality of future vocational will be set at a very ground level. Certification for pharmacists is must criteria to practice and is much varied from the certification of certified physicians and non-certified physicians. "Board of Pharmacy Specialties (BPS)" is one of the prominent certifying organization with a rock-hard background which accredits testimonial and identification of clinical pharmacist. Agenda of the "BPS" is to acknowledge knowledge of pharmacists' and their skill with special practice on the standard level in innumerable zones like nutrition support, nuclear, pharmacotherapy, oncology

pediatrics; psychiatric pharmacy, ambulatory care, critical care, and cardiology specialty certification are a matter of consideration. Along with the 2 years of residency, candidates must have cleared written examination so as to meet eligibility criteria of BPS. (Dunn, 2015)

Future Challenges

For every pro, there is a con. The conjunction of legal exercise with functionality with other systems can yield in creating a standard research affable background with the effort of government. This step from the government will enrich its active bodies with an organized system of information regarding the requirements of technical locale hence, aiding in the efficient implementation of pharmacists knowledge, skill, and potential. The reason behind permitting of 'early market approvals' even in the situations of some unprepared conditions is to be deficient of updated technologies as well as strain and demands from groups patient and their relatives, medical and pharmaceutical industries. On the other hand, clinical pharmacologists can participate as a key factor in the execution of efficient methodologies regarding authorization of 'early market approvals' from vigilance through pharmacy and safety studies which must be tested primarily on all of the quality parameters. Clinical pharmacologists also make a payment in the field of pharmaco-epidemiology. This regulation has gradually earned interests among medical vocational and is in fact used more now and then is as the only accessible attempt to reimbursements and troubles regarding enduring "Pharmacotherapy" and "Pharmaco-economics". To achieve and execute the above-discussed range of scope; governments must construct regulations and laws, the essential communications and required supplies regarding governmental medical institutions necessary. Allocations of resources to hold up the underlying base are important which must be administered through government as well. Trained specialists who are able to make scientifically rational decisions in benefit of citizen (patients) and healthcare system are the key to efficient and progressive health care system because we must not forget that "Good ethics cannot do without good science; good science can be ethical, while bad science can never be"(WHO, 2010)

Review of Literature

Nagavi (2004), has explained the status of pharmaceutical studies in India. From the first degree in pharmacy at B.H.U. to the recent developments in Indian academic structure has been noted by her in the chapter "Clinical pharmacy in India" from the book- A Text Book of Clinical Pharmacy Practice: Essential Concepts and Skills. From the history of pharmacy in India following independence, its negligence and then the story of its struggle of being accepted by society, education regulation and its practice and then finally embracing the growth and prosperity, all have been covered in her chapter thoroughly. She stated that the first acknowledgment was established in 1991 has further discussed what is the need of clinical pharmacy in India, Pharmaceutical industries, Pharmacists-their role and status in society, Government's role in the growth of Pharmacy and finally concluded with its scope in near future of India. While concluding she inclined her words towards Clinical Pharmacy Education and Practice in India along with the Future challenges where she discussed subject involvement in the curriculum and its consequences.

Muttaqi, Shamim and Omer (2012), they played a major role in guiding and counseling of Pharmacy students in practicing Clinical Pharmacy from Dow University of Health Sciences, Karachi, Pakistan. They stated in their article about the importance of expansion of competent health care structure through implementing bookish knowledge into the practical field under skillful supervision. The authors wanted to observe the effectiveness of practicing knowledge into the field and how can this strategy be made more effective to cause a better impact on both student's information as well as on their practical and personal skill. It was noticed that education of Pharmacy has developed quite remarkably but with notable increment, the demand for quality education in bulk is needed to fulfill the health care standard and citizen's medical need. Their motto of this experimental research was to create clinically quality pharmacists for the nation by indulging them with field responsibility and implementing knowledge into the real world. Their result was very affirmative and it was suggested in their article that practice of pharmacy from pharmacy student and their attachment in the hospitals should be encouraged so as to enhance their knowledge and skill as well as to satisfy the need of changing demands of the vocation.

Nigroet al. (2013), in their paper discussed about insight of "The American College of Clinical Pharmacy" (ACCP) and "Practice Research Network" (PRN) as the key part of clinical pharmacists and explains that pharmacists can improve the skills of pharmacy students as well as professionals by practicing and actively contributing in the field. It even improves the citizen's medical need in the health care system. It was suggested in the paper that with the increment in the active involvement of core practice and thriving acknowledgment the excellence of healthcare can be well managed. The authors consider it as a noteworthy break in the chief management of devotion in healthcare for every pharmacist and to attain this goal we need to amalgamate knowledge, skills, and hard work.

Abduelkarem (2014), majorly worked on the endowment and impact of pharmaceutical care in healthcare management. Care of Patient has gone perilously with the time because of the alteration in the impact of diseases on health. Clinical pharmacist if collaborating with the professionals of paramedical will no doubt brings positive influence in the configuration of management in healthcare. The agenda of the paper was to emphasize the perception that reinforcement of the system of pharmacy is required in the African and Arab countries in advance before executing any sort of unconventional services of pharmaceutical care. The paper gives an excellent overview of African, Arab countries that what is the status of these developing nations at the global level when it comes to comparing the standards of medical and healthcare with the developed countries. Further, in the paper, forthcoming prospects of practice in pharmacy and clinical part of infirmary and pharmacists review was added. It was suggested furthermore that pharmacy colleges must be revised and brought up to date along with which their curriculum needs to put up the gradual increase in the development of education of pharmacy with which developing fresh parts of pharmacy practicing.

Deshpandeet al. (2015), expressed that in India practice of Pharmacy is still in its primary phases regarding expansion and advancement. With the launch of study program -Doctor of Pharmacy (PharmD) a kind of seriousness can be seen in both academics of students and in the professional field as well. There are numerous questions and curiosity regarding this field in the minds of healthcare

providers, patients, other healthcare suppliers, escorts in pharmaceutical trades, mid-wives, potential students, physicians and even parents of related individuals to this field, since the profession isn't well acknowledged and accepted on national level in India and is still struggling for its recognition. Agenda of their paper was to acquaint pharmacy services with society, students and professionals and to blowout its expansion and progress on a national level. The article has discussed the importance and need for pharmacy services in the system of Indian healthcare against all the loopholes and drawbacks in the management system. It further explains the critical part which it plays in research areas, the hospitals, in contract/pharmaceutical corporations or firms. The paper also shares the misconceptions and realities regarding this field which people usually believes to be true, along with this information it also discusses the vocation prospects, competitive situations with their probable elucidations. It was concluded in the paper that pharmacy services will be proved to be a key factor in keeping up the livelihood in healthcare system if India in near future and it will transform the complete Indian Medical and Healthcare picture.

Dunn (2015), described that in medical caring of patients especially those dealing with cardiovascular issues, the clinical pharmacists along with collaboration with Cardiovascular Disease Team can play a critical part in healthcare management. The efficient and sophisticated care management can be straightforwardly attained if the active team of specialization is amalgamated with clinical pharmacists. This paper shares the contextual facts regarding the role of clinical pharmacist along with accreditation, teaching, and use of their probable potential in the field practice. The extensive diversity of significant outcome can play an important part in locales of ambulant services. It was concluded in the paper that enlargement and development of "Clinical Pharmacy Services (CPS)" are certainly hampered quite often by the legislature, political dogma, and recompense fences. Administrations of multidiscipline should involve active provision to tackle the obstacles so as to permit pharmacy practitioners to convey first-class service and care to the patients in packed magnitude in terms of their skills, practice and information.

Autal et al. (2016), studied to sightsee the view of stakeholder who is on the edge of the expansion of pharmacy in clinical terms in the hospitals of

Nigeria. The method used for conducting the study was through semi-structured formal conversations, which was accompanied with forty-four decisively tested stakeholders of Nigeria that included several pharmacy specialists, pharmacists, physicians, medical representatives as well as a small crowd of the patient. Recorded discussions were then fed into the "QSR NVivo 10 software" and examined thoroughly. The study revealed the vocational identity of pharmacists as well as the configuration of practice in pharmacy along with peripheral obstacles. There is a constant fight among pharmacists to create their distinctiveness on medical terms in the hospitals of Nigerian. Dearth of self-assurance, least activeness of pharmacy specialists, scarcity of pharmacy workforce, almost absence of gaining expertise, privation of strategies to develop practice of clinical pharmacy are few of the root cause that were exposed through the conduct of this study which plays major role in hampering the progress in practice of clinical pharmacy in Nigeria. Therefore it was concluded that the obstacles that got exposed through the study are required to get scrutinize on alarmingly on great demand so as to fulfill the medical requirements in Nigeria.

Sridevi (2017), expressed that there are inadequate accessibility of health-care capitals in providing convincing statistics to manage newly recognized drugs and diseases. Agenda of the paper was to learn and estimate about the superiority of the knowledge and amenity that is being provided at Government hospitals. Potential examination through survey was completed within the duration of six months from "Teaching Hospital of South Indian Tertiary Care". In order to establish thorough evaluation direct interaction was made with the health-care specialized and experts of the relevant field by prepared questionnaires. The conclusion was made that, superiority of drug "information service" is accepted very well and also delivers countless prospect regarding supplementary upgrading by involving furthermore specialists of healthcare. Further, at the end of the paper, it was added that through this study management of empathy and its refinement in the medication system can be improved.

Conclusion

Pharmacy practice is still in developing and evolving phase. It has not yet gained the recognition and achieved privilege that it should have gained long before but nevertheless, the practice of pharmacy has

revealed remarkable upgrading in the last two-three decades. The medical organization, Non-governmental organizations, medical students, pharmacists and even the civilians have now understood the necessity of this field into field practice. The association of clinical pharmacists in field practice and their attachment into the hospitals has given some very prominent and effective result. This association has not only benefitted the pharmacists in enhancing their skill, knowledge and potential but on the other hand quality of service in healthcare management and the system has also improved to a notable extent. Patients have been

delivered with quality service and have shown better improvement in their course of treatment when pharmacists interact directly and deal directly with their medical condition. It is true that the phase of clinical pharmacy and pharmacist is in struggling situation especially in developing nations when compared to the developed ones, but if the consistency of the efforts of every relevant individual of the field will be constantly made, there are bright probabilities that singularity can be established and the recognition pharmacists deserve will be acknowledged and accepted by everyone.



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