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## THE DISCLOSURE OF FEATURES, CHARACTERISTICS, POSSIBILITIES AND SPECIALTIES OF CLINICAL PHARMACISTS AS MEDIATOR AMONG DOCTORS AND PATIENTS FOR ENHANCEMENT PUBLIC HEALTH SECTOR IN A GLOBAL WORLD

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გლობალურ მსოფლიოში ჯანდაცვის სექტორის განვითარებაში, კლინიკური ფარმაცევტების, თავისებურებების, მახასიათებლების, შესაძლებლობების ინტერპრეტირება, როგორც მედიატორების ექიმებსა და პაციენტებს შორის

¹მხითარ ჰერაცის სახელობის ერევნის სახელწიფო სამედიცინო უნივერსიტეტი, ერევანი, სომხეთი; ² თბილისის სახელმწიფო სამედიცინო უნივერსიტეტი, თბილისი, საქართველო; ³დავით ტვილდიანის სამედიცინო უნივერსიტეტი, თბილისი, საქართველო; ⁴უკრაინის ნაციონალური ფარმაცევტული უნივერსიტეტი, ხარკოვი, უკრაინა

### რეზიუმე

ექიმებისა და კლინიკური ფარმაცევტების თანამშრომლობა მკურნალობის სფეროში სულ უფრო და უფრო მატულობს და დადებით შედეგებს იძლევა. ბოლო რამდენიმე ათწლეულის განმავლობაში ჩატარებული კვლევები ფოკუსირებული იყო პირველადი ჯანდაცვის სფეროში, კვლევებმა ნათლად აჩვენა, რომ წამლების არასასურველი ურთიერთქმედება, წამლის გვერდითი რეაქციები და მკურნალობის ხარჯები მცირდება ფარმაცევტების აქტიური ფარმაკოთერაპიის პროცესში. კლინიკური ფარმაცევტების ინტერვენციების გათვალისწინებისას, თერაპიული ეფექტი გაუმჯობესდა პაციენტების უმეტესობაში და ხშირ შემთხვევაში თავიდან იქნა აცილებული წამლის არასასურველი რეაქციები. ფარმაცევტების როლი ჯანდაცვის სექტორში ფართოვდება. ამის შესახებ ფარმაცევტული საერთაშორისო ფედერაციის ახალ ანგარიშშია ნათქვამი. ამგვარად, აფთიაქი არის კარიბჭე ჯანდაცვისაკენ. ფარმაცევტები მნიშვნელოვნად არიან ჩართულები მოსახლეობის ჯანმრთელობის გაუმჯობესებაში, პაციენტის ჯანდაცვის არსებული მდგომარეობის გათვალისწინებით. სტატიაში წარმოდგენილია ფარმაცევტული სერვისები, რომლებიც დაკავშირებულია ფარმაცევტულ ზრუნვასთან და პროფესიონალი ფარმაცევტების მნიშვნელობასთან, რომლებიც ხელმძღვანელობენ ჯანდაცვის სისტემებს ახალი თანამედროვე მიმართულებით. ამჟამად კლინიკური ფარმაციის პროფესია ცნობილია, როგორც მნიშვნელოვანი პროფესია ინტერდისციპლინურ ჯანდაცვის სექტორში. კლინიკური ფარმაცევტი ხდება ჯანდაცვის გუნდის მნიშვნელოვანი ელემენტი და ხელს უწყობს პაციენტის გამოჯანმრთელებას ექიმთან და პაციენტთან ურთიერთობით. იმის გამო, რომ კლინიკურ ფარმაცევტებს აქვთ ზუსტი ცოდნა ფარშაკოთერაპიული საშუალებების შესახებ და რეგულარულად ურთიერთობენ ექიმებთან, ისინი წარმოადგენენ იდეალურ რგოლს პაციენტებსა და ექიმებს შორის არსებული უფსკრულის დასაძლევად.

**Introduction:** Pharmacists have extensive systems in place to meet the needs of healthcare professionals and ensure that medicines are used effectively and safely. To achieve this, pharmacists must take on more responsibility than ever before and control the drug therapy of the clients, consumers and patients they serve. This responsibility goes far beyond the traditional distribution and dispensing methods that have long formed the backbone of pharmacies. The responsibilities of pharmacists should be extended

to monitor the progress of drug therapy to improve patient outcomes and quality of life, to consult with physicians, and to collaborate with various health care providers and specialists on behalf of patients [1,2]. Pharmacists' involvement in medicines may include drug storage, drug supply, distribution, manufacturing, formulation development, distribution, marketing, quality assurance, licensing, information management, monitoring, development, education, and research. The drug supply and information management system are an integral part of pharmaceutical services and revenues, which form the basis of pharmaceutical activities. Pharmaceutical colleges and faculties have the respective duties and responsibilities for producing postgraduate professionals who are qualified and licensed to provide pharmaceutical nursing services. Adequate results contribute to quality assurance provided that working standards are readily available [3,4].

Pharmacists' activity is at the forefront of medical care, working at their own pharmacies or in the private ones. Pharmacist's job is all about helping the public, as they participate in the medicines distribution and offering advice to patients and maintaining their health. Pharmacist work is a very demanding occupation in the world. Pharmacists usually are greatly honorable members of the society. Changes in the role of pharmacist and pharmacy community as a medical supplier accelerate along with the fast-moving environment. Today to offer advanced medical services pharmacies deliver educational information at multiple points of contacts and also to raise awareness of the disease are of great importance. These include over the counter (OTC) and the personal care aisle, a pharmacy counter, specialties publications and pickup areas prescription. These innovations are useful not only for customers' pharmacies but also create opportunities for pharmaceutical marketers, measurable return on investment. The educative center of occupational programs and schemes growingly identifies the necessity for the possibility to use the knowledge obtained via simulation laboratories or experiential studying, which needs corresponding faculties and personnel conditions to satisfy these educational necessities. Innovations in faculties and personnel positions with greater consideration to learning, or practice also include accentuation on the research within the framework of PharmD programs. There is a need to encourage the pharmacy's graduates to encounter that, as well as to conducting PharmD degree programs in postgraduate level masters or doctoral scale in philosophy or promoted scientific basement grants for the pharmaceutical, biomedical, clinical, administrative and other fields of researches in the pharmacy direction [5,6]. In the higher pharmaceutical institutions and academy, the health occupations schoolingeducation programs should contribute career possibilities for pharmacy faculty post-graduates. Pharmacy schoolmaster must make more energetically engaged at the growth for particular training /educational possibilities to arrange and overlook the newest generation for pharmacy faculty or program personnel positions in higher education institutions. In order to engage pharmacy faculty post-graduates to take part in the scientific research. Pharmaceutical faculty program post-graduate professionals should be supported to research the capacity function and role of various pharmaceutical, medical/health care, academic and educational, research and scientific program schemes for to growth consideration in inter-professional scientific groups upon the health professions formation, teaching and education; which is very significant for the high-quality patient care services [7,8].

**Goal**: The main aim of the study was to analyze the features, characteristics, possibilities and specialties of clinical pharmacists as mediator among doctors and patients for enhancement public health sector in a global world.

Material and methods: Research objectives are materials of sociological research: the study was quantitative investigation by using survey (Questionnaire). The study was quantitative investigation by using survey (Questionnaire). We used methods of systematic, sociological (surveying, questioning), comparative, segmentation, mathematical-statistical, graphical analysis. Questionary was for pharmacists, for pharmacy faculty students, for patients, for health care professionals and for manager pharmacists. The data was processed and analyzed with the SPSS program. The survey was conducted through the questionnaires. Study of the data was processed and analyzed with the SPSS program. In order to meet the objectives, set in the research we also used the results obtained through analysis of available official information, studies and opinions about pharmacists, as well as the methods of quantitative studies. All received information was analyzed and interpreted. Were conducted descriptive statistics and regression

analyses to detect an association between variables. The research implementation required the following sub studies: the manifestation of features, characteristics, possibilities and specialties of clinical pharmacists as mediator among doctors and patients for enhancement public health sector.

Results and discussion: The main difference between clinical pharmacists and regular licensed pharmacists is the ability of clinical pharmacists to interact with patients and they can recommend specific drugs and dosages for a particular patient to monetize the drug. The term "pharmaceutical care" comes from clinical pharmacy. The two concepts are compatible and seem to have similar goals. One way to distinguish between the two is to use the description of "clinical pharmacy" as a pharmacy practice in the larger pharmaceutical supply chain to which the pharmacist will contribute. The goal is to achieve pharmacotherapeutic results and improve the quality of life of patients. Pharmaceutical care can be defined as the provision of immediate and timely medical care to achieve specific results that improve the patient's quality of life. Thus, pharmaceutical care can be considered part of clinical pharmacy [9-11].

The pharmaceutical profession in Georgia has not yet evolved into a clinical profession and is more focused than ever on the transition of the patient from a product-centric profession (including drug dosing, preparation and evaluation) to a product-centric profession. The pharmacist plays an important role in ensuring the health of the patient. The biggest differences were found between clinical pharmacists and pharmacists regularly registered as clinical pharmacists who improve patients' quality of life. Therefore, pharmaceutical care can be seen as a form of clinical pharmacy. The establishment of clinical pharmacy in Georgia can be considered when the registration of clinical pharmacy appeared in the national register of qualifications, but there is still no structure, document that would define the role of the pharmacy clinic and career opportunities, although many clinics participate in international clinical trials in which one must participate clinical pharmacist according to the international protocol, although at this stage such a profession and the staff of clinics are not established, it seems that general practice pharmacists formally perform the functions of a clinical pharmacist, which was confirmed in our study. The role of the pharmacist in Georgia needs to be developed, which remains a problem: some clinical guidelines have been developed in Georgia [11,12].

A clinical pharmacist is obliged to participate in the development of a policy for the use of medicines, to cooperate with specialists in the development of recommendations and guidelines for the treatment of specific diseases, to participate in the purchase and sale of medicines, and the creation of dosage forms and etc. The pharmacist profession is not yet a clinical profession, but more than ever focused on transforming a product-centric profession (including drug purchasing, preparation, and evaluation) into a patient-centered profession. The clinical pharmacist plays an important role in ensuring the health of the patient.

Clinical Pharmacy and Career Opportunities Although many clinics around the country are participating in international clinical trials in which international protocol requires the participation of a clinical pharmacist, although at this stage such a profession and clinical staff seem to be general practitioners, formally the duties of a practicing pharmacist-clinician, which confirmed our study that the pharmacist is needed to expand the role in Georgia. Clinical pharmacy as a branch of pharmacy dealing with the science and practice of the rational use of medicines. With this definition, the possibilities for clinical pharmacists are endless. There are many career options for pharmacists who are looking for clinical opportunities in their practice. As a clinical pharmacist, you can provide general clinical services. However, there are several highly specialized areas that cover different groups of patients [13,14].

Possible reasons may include a lack of acceptance of the pharmacist's professional position by other healthcare professionals, poor leadership skills, patient perceptions, and the existence of communication gaps between pharmacists and physicians. These challenges are particularly noticeable in developing countries. Physician expectations and perceptions about the roles and responsibilities of pharmacists are the main factor influencing the advancement of clinical pharmaceutical services in hospitals. This includes managing drug therapy, dose adjustments, interventions to optimize drug therapy, and providing information about drugs to healthcare professionals and patients. A better understanding of the perspectives of healthcare professionals regarding clinical pharmaceutical services may provide a better opportunity to identify future challenges and opportunities for clinical pharmacists in the hospital.

Therefore, the present qualitative study aimed to examine the challenges and opportunities of clinical pharmaceutical services provided in the hospital from the perspective of healthcare professionals.

The concept of pharmaceutical care has evolved into integrated medication management as part of clinical pharmacy. Drug treatment has expanded as treatment regimens have become more complex and specialized, particularly in more complex patients who may have five comorbidities and are taking an average of eight drugs at a time. To achieve the best results of therapy in patients, systematic and complex pharmacotherapy is required.

Conclusion: Globally, the profession of clinical pharmacist is considered an important profession in the interdisciplinary healthcare organization. The clinical pharmacist becomes an important member of the healthcare team, contributing to patient care through interaction with the doctor and patient. Because clinical pharmacists have in-depth knowledge of therapeutics and interact regularly with prescribers, they are ideally placed to bridge the gap between patients and physicians. An association of clinical pharmacists and doctor clinicians can lay a solid foundation for quality patient care. The presence of a clinical pharmacist in the department was a revolutionary feature of developments in the field of pharmacy. Clinical pharmacists participate in rounds with physicians and make suggestions or recommendations as needed. Doctors prescribe medicines and a pharmacist checks a prescription to ensure the rational use of medicines. They check whether there are indications for the drug, whether the drug/dose/duration/dosage/time is indicated correctly, etc. If there are deviations from these parameters, they take appropriate measures, inform the prescribing physicians and document the interventions. The physicians' and pharmacists' additional cooperation regarding the impact of the intervention indicates that the pharmacist's intervention had a proven better therapeutic outcome.

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# THE DISCLOSURE OF FEATURES, CHARACTERISTICS, POSSIBILITIES AND SPECIALTIES OF CLINICAL PHARMACISTS AS MEDIATOR AMONG DOCTORS AND PATIENTS FOR ENHANCEMENT PUBLIC HEALTH SECTOR IN A GLOBAL WORLD

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#### **SUMMARY**

Collaboration between physicians and clinical pharmacists in the field of nursing is expanding and showing positive results. In recent decades, research has focused on cardiovascular disease in primary health care and has shown that drug interactions, side effects, and treatment costs are reduced by involving pharmacists in the treatment process. The study showed that thanks to the interventions of clinical pharmacists, the therapeutic effect improved in the majority of patients and side effects were avoided in many cases. The role of pharmacists in health care is growing. This is stated in the new report of the International Pharmaceutical Federation. The pharmacy is the gateway to healthcare. The pharmacist helps the population improve their health. Considering the current situation of patients' interest in healthcare. The introduction of pharmaceutical services related to self-medication and the importance of professional pharmacists in reorienting the healthcare system to a modern direction. The modern selfhelp system controls are described and the reorientation of health care systems is fundamentally changing. The profession of clinical pharmacist is now recognized as an important profession in the interdisciplinary healthcare organization. The clinical pharmacist becomes an important member of the healthcare team and contributes to patient care through interaction with the doctor and patient. Because clinical pharmacists have in-depth knowledge of drug therapy and are in regular contact with physicians, they are ideally placed to bridge the gap between patients and physicians.

**Keywords:** Features, specialty, clinical pharmacists, mediator, doctors, patients, public health sector.

