



**МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ  
НАЦІОНАЛЬНИЙ ФАРМАЦЕВТИЧНИЙ УНІВЕРСИТЕТ  
КАФЕДРА КЛІНІЧНОЇ ЛАБОРАТОРНОЇ ДІАГНОСТИКИ,  
МІКРОБІОЛОГІЇ ТА БІОЛОГІЧНОЇ ХІМІЇ**



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**COMPREHENSIVE ANALYSIS AND CRITICAL EVALUATION OF THE  
DISTINGUISHING QUALITIES, FUTURE DIRECTIONS, CHALLENGES,  
OPPORTUNITIES, OBSTACLES, AND PROFESSIONAL DEVELOPMENT  
PROSPECTS OF THE PHARMACIST ROLE AND OCCUPATION IN  
CONTEMPORARY LOCAL AND GLOBAL CONTEXTS IN GENERAL**

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**Abstract.** This research aimed to examine the unique attributes, future trajectories, difficulties, potentials, barriers, and professional growth avenues within the pharmacy field on both national and international scales in the 21st century. The investigation employed a quantitative methodology, utilizing an in-depth interview technique with participants. Approved questionnaires were administered to a randomly selected respondent pool. The study incorporated systematic, sociological (involving surveys and questionnaires), comparative, mathematical-statistical, and graphical analytical techniques. Data processing and analysis were conducted using the SPSS program (version 11.0). Descriptive statistics and regression analyses were performed to identify associations between variables. A Chi-square test was applied to determine statistical significance and differences, with a p-value of less than 0.05 established as the threshold for significance. The findings indicate that pharmacists, as regulated medical specialists, are overlooked within the Georgian healthcare system. Consequently, the higher pharmaceutical education system should transition towards a new model with a greater emphasis on pharmacotherapy, pharmaceutical care, and clinical pharmacy. Ultimately, the pharmacist role must evolve into a crucial component of the Georgian healthcare framework. State health policy must formulate clear concepts and universal principles for the pharmacy profession. Pharmacists should be recognized as regulated healthcare practitioners, akin to family doctors. Georgia must develop and enforce new standards for pharmacist registration, licensing, and accreditation that align with international pharmaceutical programs. Furthermore, qualified Georgian pharmacists should possess the right to practice in other European nations, requiring the recognition of Georgian pharmacist certifications in Western countries. Georgia should establish a pharmacist registration standard comparable to those in Great Britain and other Western nations. To elevate professional standards, the government should implement a certification system for holders of higher pharmaceutical education degrees. This is vital for: Professional refinement and self-realization; Career progression and personal growth; Job and career satisfaction; The establishment of a system for continuous professional education (CPE); Achieving a significantly higher status among healthcare professionals; Improving economic and material welfare; Enabling the full application of acquired knowledge in practice; Permitting private pharmaceutical enterprise. Support is needed for creating and delivering continuous education courses designed to elevate the qualifications of pharmaceutical staff. Pharmaceutical education must become a lifelong process to boost professional qualification, expertise, knowledge, and competency. The foundational training of pharmacists must meet modern demands, and the state should develop accessible, continuous pharmaceutical education programs for all

practitioners. This includes offering qualification upgrade courses, professional training, and educational opportunities that are universally available, ensuring that a pharmacist's learning never ceases. Advancing pharmacy education and expanding continuing education will enhance the professionalism of pharmaceutical personnel. Pharmacists should be tasked with monitoring and reporting drug side effects. The preparation and execution of registration-certification regulations for pharmacists are essential, alongside promoting research across all pharmaceutical practice areas. Awareness of the core functions and value of the pharmacist's role must be raised among both medical personnel and the general public. Pharmacists should be empowered to take a greater role in patient medication management and to collaborate with physicians on treatment plans. Fostering deep cooperation between pharmacists and doctors on issues of pharmacotherapy and healthcare is necessary. The state must safeguard the authority of the pharmacy profession. With government support, the prestige and social significance of the pharmacist role within the healthcare system should be elevated. The profession must gain more influence and power, achieving a much higher status. This pivotal change will be realized when the pharmacist profession is officially moved into the list of regulated health professions.

**Keywords:** Some peculiarities, prospectives, challenges, opportunities, pharmacy, features, pharmacist, profession, job, enhancement.

**Introduction.** Today, the traditional perception of the profession of pharmacist in community pharmacies risks disappearing on a global scale due to several factors. Among many factors, online pharmacies are becoming increasingly important due to their ability to meet consumer demand. However, they jeopardize “personal” contact, undermine customer loyalty based on direct “human” interaction and thus reduce pharmacists to the rank of simple businessmen. Communication regarding the provision of patient-centered care is highlighted as an essential element in establishing strong and adequate interpersonal relationships with the patient, increasing the efficiency of the consultation process, and improving the professionalism of the pharmacist in community pharmacy. Community pharmacists can also play an important role in improving medication adherence, thereby helping to reduce morbidity, mortality and healthcare costs [19]. In this context, it has been shown that the most effective interventions are delivered face-to-face and directly to patients, and that pharmacists' interventions are more effective than those of other healthcare professionals [1-3].

Analysis of the literature showed that research aimed at the study of individual aspects of the process of professional development of pharmaceutical professionals are dedicated to the development of requirements to ensure effective pharmaceutical care,

studies of postgraduate education, finding strategies for management of pharmaceutical personnel, job satisfaction of pharmacists, issues of their psycho-social adaptation to the emerging market conditions. However, comprehensive studies aimed at understanding the processes of professional trainings of pharmaceutical specialists to provide high quality pharmaceutical care have not yet been carried out [5-7].

Development of organizational and functional models for licensing pharmaceutical activities, is considered as one of the mechanisms to improve the efficiency of public administration, and has great relevance and scientific and practical value. An integral part of the state system of measures to implement the rights of citizens to protect their health is pharmaceutical care, the quality of the provision which is largely dependent on the qualifications of the personnel pharmacist. In this regard, the professional qualification of experts is under the control of the state and is one of the objects of state regulation of relations in the field of drug- medicine, whose purpose-maintaining the competence of expert specialists on throughout their careers with varying requirements for professional quality. The modern system of pharmaceutical care to improve the quality of life of patients depends on highly skilled professionals in drug-store whose competence has been growing in the process of professional development. The pharmacists require not only the use of earned at the institution of knowledge and skills, but also the willingness to professional self-development. Since the scope of drug treatment is one of the most socially significant areas of state regulation, the sequence in carrying out reform measures, conservation experience, and smooth introduction of new methods become crucial. However, comprehensive studies aimed at understanding the process of professional formation pharmaceutical worker, for to provide quality pharmaceutical care has not yet been carried out. Development of organizational and functional model of the licensing of pharmaceutical activities, pharmacists job as one of the mechanisms to improve the efficiency of public pharmaceutical and public administration, has great relevance, scientific and practical value [8-10].

Developed countries and many developing countries in the field of pharmacy are regulated, as well as family medicine. The pharmacist as family doctor needs of higher education, post-graduate and continuing education in pharmacy, a pharmacist license and periodic accreditation. In western countries in pharmacy, allowed to work only with higher pharmaceutical education specialists who have graduated from state-recognized and accredited colleges. The opening of a pharmacy permit is issued only to a person of higher pharmaceutical education, who passed the diploma courses in pharmacy and earned the right to open the pharmacy. It should be noted that in developed countries and in many developing countries pharmaceuticals are regulated

profession, as well as family medicine, pharmacist as a family doctor, need higher pharmaceutical education, diploma and continuous pharmaceutical education, pharmaceutical license and periodic accreditation. Only pharmacists with higher pharmaceutical education have the right to work as pharmacists in pharmacies, who have graduated from universities recognized and accredited by the state [11-14].

The modern system of pharmaceutical care, aimed to improve the quality of life of patients, depends on highly skilled professional pharmacists whose competence keeps growing in the process of professional development. Pharmaceutical specialists are required not only to have the ability to use the knowledge and skills gained at the educational institutions, but also to be ready and motivated for professional self-development. Since the scope of drug turnover is one of the socially important areas of state regulation, the sequence in carrying out reform measures, accumulation of experience, and smooth introduction of new methods become crucial [15-16].

In the field of pharmacy, it is noted an increase of such negative trends, poor mechanisms of interaction between professional education and the pharmaceutical market, slow adaptation of graduates to the market reality. The differences between the increasing demands of consumers of drugs and the level of knowledge of specialists, as well as slow adaptation to market reality can affect the process of professional development of specialists and the quality of pharmaceutical care. The above-mentioned trends, the increasing role and responsibility of pharmaceutical professionals in the health care system make it necessary to analyze current practical experience and investigate the theoretical foundations of personality development of specialists, as well as identifying new conditions for their development as professional pharmacist practitioners [17-18].

First time in Georgia scientifically grounded was studied the process of professional formation of pharmacists in the context of pharmaceutical care, including the stages of professional development. First time in Georgia were identified the factors, which was very important for pharmacist professional formation. Were study role of pharmacist and were identified of the specific features for the formation of pharmaceutical specialists at various stages. We make comprehensive study, the essence, regularities and peculiarities of the process of professional development of in the context of pharmaceutical care. Based on the literature review and analysis of the results of the studies, work has been obtained as general and specific theoretical and practical scientific innovations, have developed conclusions and practical recommendations. Which in turn will have a positive impact on the quality of pharmaceutical and health services delivery [19-22].

**The aim of the study.** The main aim of the study was to analyze the

distinguishing qualities, future directions, challenges, opportunities, obstacles, and professional development prospects of the pharmacist role and occupation in contemporary local and global contexts in general.

**Materials 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). The in-depth interview method of the respondents was used in the study. The approved questionnaires were used (Respondents were randomly selected).

We delivered sociological questionnaires with respondents by using interviewing methods. The study was quantitative investigation. Obtained data was statistically processed with the use of SPSS software. There were used 7 types of approved questionnaires: Total number of respondents were:  $1506+222+307+810+319+314=3478$ .

1. Questionnaire for manager pharmacists, 410 manager pharmacists were participated in the study.

2. Questionnaire for patients, 1506 patients were participated in the study.

3. Questionnaire for employed pharmacy faculty student, 222 employed pharmacy faculty students were participated in the study.

4. Questionnaire for Health-Care Specialists, 307 health-care Specialists were participated in the study.

5. Questionnaire for pharmacist specialist, 810 pharmacists were participated in the study.

6. Questionnaire for (pharmacy faculty) students, 319 pharmacy faculty students were participated in the study.

7. Questionnaire for young pharmacist specialist up to 35 years. 314 young pharmacist specialists were participated in the study.

Were used methods of systematic, sociological (surveying, questioning), comparative, segmentation, mathematical-statistical, graphical analysis. The data was processed and analyzed with the SPSS program. Results and discussion: Questions and answers are given in the tables. On each question are attached diagrams or table. Questionnaire and diagrams are numbered. Study of the data was processed and analyzed with the SPSS program. We conducted descriptive statistics and regression analyses to detect an association between variables. Statistical analysis was done in SPSS version 11.0. A Chi-square test was applied to estimate the statistical significance and differences. We defined  $p < 0.05$  as significant for all analyses. The study's ethical items. In order to provide the study's ethical character each participant of it was informed about the study's goal and suggested of willingness of the work to be done.

So, the respondents' written or oral compliance was got on that issue. All the studies were carried out by the selected organizations administrations' previous compliance. Were used Informed consent form for each respondent to participate in an anonymous survey. During the whole period of research, the participants incognita was also provided. For the international rules and criteria' conformity this human subject comprising given study was discussed and confirmed on the Bioethics Committee sessions of the YSMU. 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. We conducted descriptive statistics and regression analyses to detect an association between variables. Statistical analysis was done in SPSS version 11.0. A Chi-square test was applied to estimate the statistical significance and differences. The research implementation required the following sub studies: Some peculiarities, prospectives, challenges, opportunities, impedances and features of pharmacist profession and occupational enhancement prospects in general locally and globally in XXI century. Based on the received data, we performed analysis, summary, discission, and also meta-analysis, review and overview [23-27].

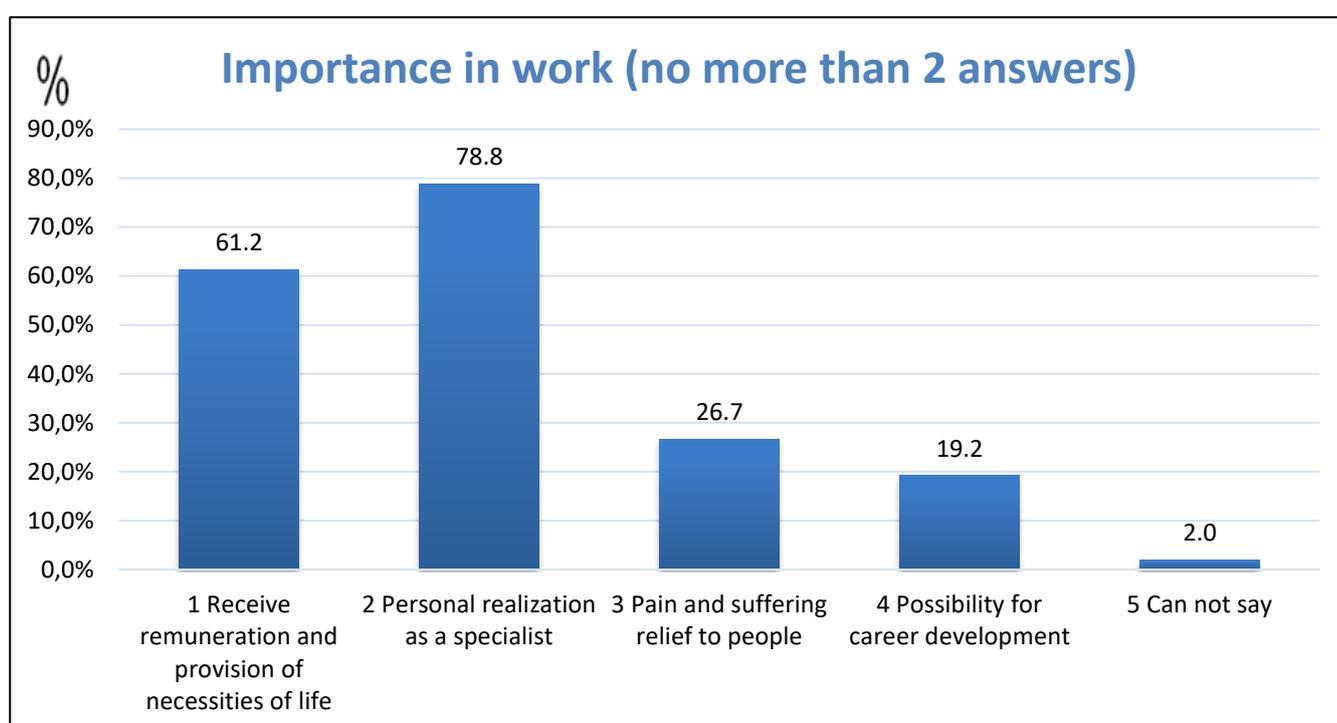
**Results and Discussion.** Developed countries and many developing countries in the field of pharmacy are regulated, as well as family medicine. The pharmacist as family doctor needs of higher education, post-graduate and continuing education in pharmacy, a pharmacist license and periodic accreditation. In pharmacy, allowed to work only with higher pharmaceutical education specialists who have graduated from state-recognized and accredited colleges. The opening of a pharmacy permit is issued only to a person of higher pharmaceutical education, who passed the diploma courses in pharmacy and earned the right to open the pharmacy [28-30].

The main goal of the research is to develop a methodology of studying and improving the process of professional development of pharmacist, pharmaceutical specialists and regulatory requirements for pharmaceutical staff of public pharmacies [25-26]. The study will allow to develop a scientifically based methodological approach to study and improve the process of professional training of pharmaceutical professionals, including rationalization of the stages of professional development, identification of relevant factors involved in the process of professional development and set a series of performance criteria for evaluation of the process in question, as well as studying the role and determining the characteristics of professional formation of pharmacists at various stages of their field activities. Within the proposed methodological framework with the use of a comprehensive investigation, will be identified patterns and features of the process during the professional development of

employees of the pharmaceutical industry and public pharmacies [31-35].

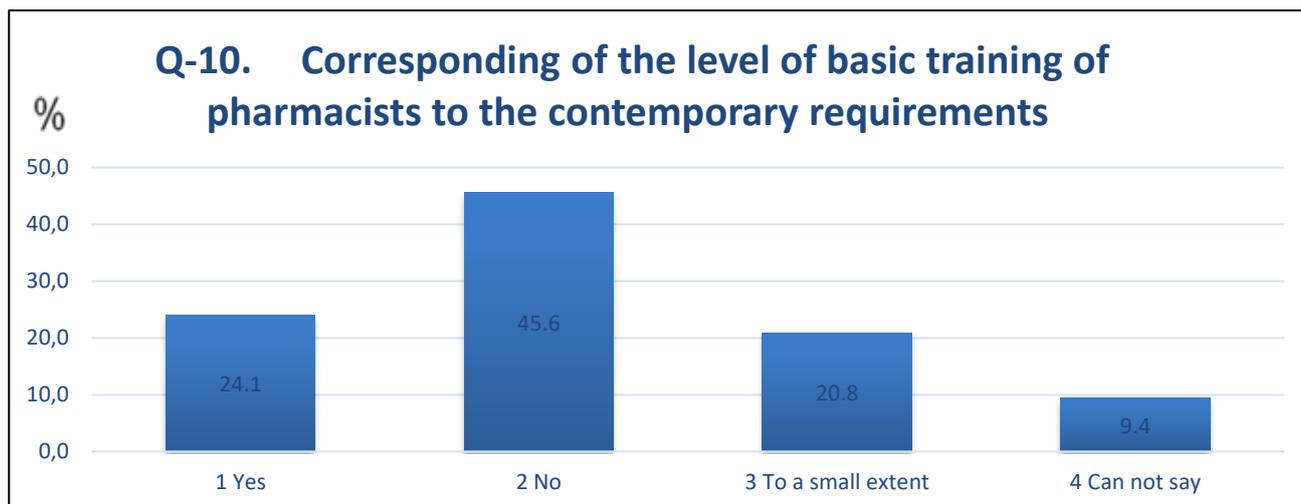
About half part of the respondents considered that pharmacist is not responsible for registration of adverse effects of the drugs, while less than a third part of them considered pharmacist to be responsible for that. By legislation one of the functions of pharmacist is to register the side effects of drugs, what is very essential for patients' safety. It should increase the awareness of pharmacist as the health professional [36-37].

The respondents' majority considered that importance in work of pharmacist was in personal realization as a specialist, receiving remuneration and provision of necessities of life. The respondents' minority considered it to be in relief of pain in suffering of people. (*Illustration 1*).



**Illustration 1.** Important issues in work for the respondents' (public health specialists)

Less than half part of the respondents considered that the level of basic training of pharmacists was not corresponding to the contemporary requirements. According to the sociological study results of the public care specialists it is obviously, that all pharmacists should have higher pharmaceutical education from the state recognized and accredited higher education institutions and universities. Pharmacists' specialty should become a regulated health care profession. According to that Government should make certification, licensing and accreditation of pharmacist professionals [60-62]. (*Illustration 2*).



**Illustration 2.** The respondents' opinion about pharmacists' basic training level correspondence to the contemporary requirements.

Analysis the data of respondents' answers on the question „Do you think that the Government should make the certification of pharmacists?“(Q) revealed the following in different categories: the majority of chief pharmacists, of consumers of pharmacies, of the employed students, of the healthcare specialists and pharmacists considered, that Government should make certification of pharmacists ( $P < 0.000$ ) There are statistically significant points between variables. (*Table 1*).

**Table 1.**

**Respondents' opinion about pharmacists' certification**

<b>Cross tabulation</b>				
Do you think that the Government should make the certification of pharmacists?	Do you think that the Government should make the certification of pharmacists?			Total
	1. I agree	2. I partially agree	3. I Do not agree	
Chief Pharmacists	76.6%	16.3%	7.1%	100.0%
Customers	82.6%	11.6%	5.8%	100.0%
Employed Students	95.9%	3.6%	0.5%	100.0%
Public Health Specialists	94.8%	4.6%	0.7%	100.0%
Pharmacist specialists	71.9%	21.9%	6.3%	100.0%
Average	81.2%	13.5%	5.2%	100.0%

<b>Chi-Square Tests</b>			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	132.625 <sup>a</sup>	8	0.000

Coupling the data of respondent's answers' analysis of the questions "Indicate your sex" (Q1) and "Are you satisfied with your professional career?" (Q13) it became apparent that variables are gender dependent ( $P=0.001$ ), there is a statistically significant differences between two groups, that means that the male pharmacists were less satisfied with their professional career, rather than the female pharmacists (See tabl.2).

**Table 2.**

**Satisfaction professional career of respondent pharmacists according gender**

<b>Cross tab</b>			
Satisfaction professional career of respondent pharmacists			
Are you satisfied with your professional career?	Q1 Indicate your sex		Total
	1 Female	2 Male	
1. Yes	30.88%	18.00%	30.40%
2. Partially	33.95%	27.20%	33.70%
3. No	35.17%	55.00%	35.90%
Total	100.0%	100.0%	100.0%

<b>Chi-Square Tests</b>			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-square	23.884 <sup>a</sup>	2	0.001

Coupling the data of respondents' answers' analysis of the questions "Indicate your sex" (Q1) and "Q14 Are you satisfied with your work (job)?" (Q14) it became apparent that variables are gender dependent ( $P=0.024$ ), there is a statistically significant differences between two groups, that means that the male pharmacists were less satisfied with their work, rather than the female pharmacists (See tabl.3).

**Table 3.**

**Satisfaction with work of the respondent pharmacists according gender**

<b>Crosstab</b>			
Satisfaction with work of respondent pharmacists			
Q14 Are you satisfied with your work?	Q1 Indicate your sex		Total
	1 Female	2 Male	
1. Yes	44.00%	22.65%	33.20%
2. Partially	39.90%	11.90%	37.30%
3.No	11.80%	62.15%	24.40%
4. Cannot say	4.40%	3.30%	5.10%
Total	100.0%	100.0%	100.0%

<b>Chi-Square Tests</b>			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-square	24.261 <sup>a</sup>	3	0.024

Coupling the data of respondents' answers' analysis of the questions "Indicate your sex" (Q1) and „Are you satisfied with the time duration of your job? “ (Q26) it became apparent that variables are gender dependent (P=0.048), there is a statistically significant differences between two groups, that means that the male pharmacists were less satisfied with the time duration of work, rather than the female pharmacists (*tabl. 4*).

**Table 4.**

**Satisfaction with time duration of work of the respondent pharmacists according gender**

<b>Crosstab</b>			
Respondent pharmacists' satisfaction with the time duration of job			
Q26. Are you satisfied with the time duration of your job?	Q1 Indicate your sex		Total
	1 Female	2 Male	
1. Yes	22.38%	14.70%	22.10%
2. Partially	34.10%	36.70%	34.20%
3. No	43.51%	48.60%	43.70%
Total	100.0%	100.0%	100.0%
<b>Chi-Square Tests</b>			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-square	19.775 <sup>a</sup>	2	0.048

Coupling the data of respondents' answers' analysis of the questions "Indicate your sex" (Q1) and „Are you satisfied with your income?“ (Q27) it became apparent that variables are gender dependent (P=0.019), there is a statistically significant differences between two groups, what means that the male pharmacists were less satisfied with income, rather than the female pharmacists (*tabl.5*).

Psychological studies show that the influence of these factors on professional choice is different. It is established that a sufficiently high level of education of the mother or the professional status of the father promotes the agreement of the children. The opinion of the parents about the choice of the profession and the influence of the parents is stronger than the influence of teachers or a specialist in career counseling. At the same time, the parents' opinion acts as a factor of inhibition of the professional development of the individual in the period of professional orientation [38-39].

**Table 5.**

### Satisfaction of the respondent pharmacists with income according gender

<b>Crosstab</b>			
Satisfaction of the respondent pharmacists with income according gender			
Q27. Are you satisfied with your income?	Q1 Indicate your sex		Total
	1 Female	2 Male	
1. Yes	10.59%	0.00%	10.20%
2 .Partially	25.48%	23.30%	25.40%
3. No	63.82%	76.70%	64.30%
Total	100.0%	100.0%	100.0%

<b>Chi-Square Tests</b>			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-square	13.314 <sup>a</sup>	2	0.019

In the current market economy, when choosing future professional activity, young people take into account the socio-economic demand for a particular profession, the real opportunities for training and employment in this profession, its material and social significance. In psychological researches it is proved that the discrepancy of the professional interests of the individual with the needs of society and the possibilities of the personality entails dissatisfaction with the chosen work activity. A person spends unproductive efforts to assimilate professional knowledge, skills and abilities, performs work within the framework of his/her external, formal duties or changes his/her profession. We believe that the social significance of such work is low [40-42].

The experience of economically developed countries confirms that in the modern conditions of the development of pharmaceutical production, a highly qualified specialist is needed, who, first of all, would have full knowledge of medicines and, at the same time, focused academic knowledge in the field of disease treatment. This specialist is a clinical pharmacist.

The well-coordinated work of the clinical pharmacist and the clinician makes it possible to rationally use the growing arsenal of medicines. Obviously, this is only possible by creating an atmosphere of cooperation between the clinical pharmacist and the doctor. To create a collaborative atmosphere, it is not enough to educate clinical pharmacists, it is also necessary to educate physicians [43-45].

In Western European countries, the specialty "Clinical Pharmacy" appeared and took shape in the 70s of the last century. The field of activity of specialists in this area is not limited to work only in pharmacies. They help physicians in the rational selection of drugs, taking into account their pharmacokinetics, pharmacodynamics, interactions

with other drugs, as well as the cost of treatment.

In fact, the full demand for clinical pharmacy is created only if the model of insurance medicine works correctly. Georgia is gradually entering this phase of development of the insurance business [46-48].

The work of insurance companies should be focused on interaction with clinics and pharmacies that have highly qualified specialists. These specialists must have systemic knowledge in the field of medicine, pharmacology, clinical pharmacology, clinical pharmacy, physician and clinical pharmacist. The majority of respondents cited the high patient workload as a unique opportunity because clinical pharmacists may be faced with many cases and rare diseases that they cannot find anywhere else. Thus, it allows clinical pharmacists to be exposed to various diseases and thus expand their competence through better experience [49-51].

The government policies and the existence of national guidelines played an important role not only in the implementation of the pharmaceutical care program, but also in the sustainability that allowed the implementation of services. There are potential barriers to service delivery and they attempted to list all challenges. The challenges described by most of the respondents' stem from the availability of pharmacists, other healthcare practitioners, academic policies and work guidelines. Challenges are of clinical pharmacy services improvements. Challenges are defined as: Any situation that suggests effective implementation of clinical pharmacy, pharmacist challenges include inadequate service facilitation, lack of service continuity, poor drug information center service and lack of commitment, communication and trust between clinical pharmacists. Most respondents reported that poor service attitudes, conflict of interest due to unclear scope of practice, and lack of cooperation are challenges emerging from health practitioners such as nurses and doctors. Some respondents also described challenges arising from hospital management and set-up. The challenges they mentioned include lack of training, qualified manpower, lack of incentives, lack of clinical pharmacy ward facilities and collaboration between academics and hospital clinical pharmacists. Other challenges cited by respondents were due to academic policies and the curriculum itself [52-54].

This study describes the personal experiences of health practitioners towards clinical pharmacy services provided in hospital, thereby extracting opportunities and challenges which will be used as a means to strengthen the services. In addition, participants were also asked to describe how they perceive the scope of practice in clinical pharmacy services from which challenges and opportunities were also identified. The perception of scope of pharmacy practice among health practitioners reflects whether there is conflict of interest and resistance to cooperation. The scope of

practice varies between countries as determined by the governing board of pharmacy. Many countries allow the pharmacist to play a part only within certain areas of the medication use process, while in other countries the scope of practice is so wide-ranging and inclusive that, it encompasses the entire medication use process. Some of the respondents in this study thought that the scope of practice should be limited to drug therapy. However, others suggested that the scope can range from diagnosis to prescribing of drugs. The respondents explained that this can be achievable only if get rid of conflict with other practitioners as their job description and authorities are not well delineated [55-58].

As clinical pharmacy services are at their infancy, the respondents suggested that services should focus more on key areas that are less considered by other practitioners. They believed this would increase acceptability of clinical pharmacy services by other health providers. One study reported that clinical pharmacists are experts in therapeutic knowledge, experience and skills which are used to ensure desired patient outcomes utilizing the best available clinical evidence and intervention in collaboration with the health care team. Some of the opportunities listed in this study also have some drawbacks which may be a source of challenge unless they are improved. For instance, the new clinically-oriented curriculum is much better than the previous product-oriented one, but still the curriculum is not as competent as a PharmD program. In addition, poor drug information service is another area of practice in need of improvement to satisfy the health practitioners [59-62].

Clinical pharmacy services in hospitals face different challenges which may arise from other health practitioners' willingness, practice setups, and clinical pharmacists' attitudes. Further, another study conducted revealed sets of challenges that limit pharmaceutical care practice, such as lack of time and need of effort, insufficient remuneration, no team work among health care workers and deficiency in staff strengths. Our finding reflect that challenges may originate from the pharmacists themselves, other health practitioners' issues, academic policies and availability of working guidelines. The interviewees listed many potential and actual challenges. It is also important to note that the number of clinical pharmacists included in clinical settings is very minimal and that may be a reason for absence of service continuity. However, The Schools of Pharmacy should take the initiative to integrate, empower and employ hospital clinical pharmacists or provide incentives for the academic staff to improve the continuity of services in clinical pharmacy [63-65].

This study describes practitioners' personal experiences with clinical pharmacy services, thereby identifying opportunities and challenges to be used as a means to improve services. In addition, participants were also asked to describe how they

perceive the scope of practice in clinical pharmacy services, from which challenges and opportunities were also identified. The perception of the scope of pharmaceutical practice among practitioners reflects conflicts of interest and resistance to collaboration. Interviewees also suggested possible solutions to responsible parties to take advantage of potential opportunities and overcome challenges [66-69].

Maintaining competence through continuing education/continuing professional development - In many countries, pharmacists are required to undergo continuing education programs involving legal and/or ethical issues. The provision of pharmaceutical services requires adherence to national quality standards and guidelines, with a clear differentiation between basic/basic services and professional services. Pharmacists play a critical role in providing these services and their education, qualifications, functions and duties vary depending on the country in which they work. The scope of practice varies by state, as determined by the board of pharmacy governors. Many countries only allow pharmacists to participate in certain areas of the drug administration process, while in other countries the scope of practice is so broad that it includes the entire drug administration process. Some respondents to this study felt that the scope of practice should be limited to drug therapy. However, others suggest that the scope of diagnosis may vary from diagnosis to prescription of medications. That, can only be achieved if eliminate conflicts with other practices, as their job responsibilities and powers are not clearly defined. All pharmacists should be well versed in the various subjects of pharmacotherapy, each may choose to pursue a general clinical career or specialization. A pharmacist may choose to specialize in a particular field at any time during their career. The following list includes specialties in which clinical pharmacists may practice. While this list is not exhaustive, it does demonstrate the diversity of clinical pharmacy careers: Regardless of the narrow specialty, a clinical pharmacist must have: a desire to constantly work with the literature, the ability to critically evaluate the literature, excellent communication skills, the ability to cooperate with other medical professionals, the desire/ability to defend the interests of the patient and the profession of a pharmacist, strong leadership qualities. In fact, the full demand for clinical pharmacy is created only if the model of insurance medicine works correctly. Georgia is gradually entering this phase of development of the insurance business. The work of insurance companies should be focused on interaction with clinics and pharmacies that have highly qualified specialists. These specialists must have systemic knowledge in the field of medicine, pharmacology, clinical pharmacology, and clinical pharmacy [70-72].

The next stage of professional development of specialists is the adaptation to work activity: the beginning of an independent professional activity and the

accumulation of experience by young specialists. This stage reflects the student's transition to a new type of activity - to professional work in its various forms in the conditions of real situation, performance of official duties, production relations, finding oneself in the system of work collectives. In the course of adaptation, the system of professional knowledge and skills is acquired in the required volume; The emergence of interest in the work, which begins to play an increasingly important role in life, a sense of the connection between success and the profession, is self-determination for professional development [73-75].

On the basis of theoretical analysis of the process of professional development will be developed by a set of common criteria for the effectiveness of this process, which will be based on the regularities of formation, reflecting its focus and dynamics: an interest in their chosen profession, changing choice motives, increased satisfaction of occupational choice and labor, increasing the motivation to knowledge and professional development, change career planning purposes. The goal, purpose and objectives of the planned research. The main aim is to develop a methodological approach to study and improve the process of professional development specialists' pharmaceutical profile, regulation requirements for pharmaceutical staff in drugstore professional career improvement strategy and jobsatisfaction among pharmacists. A systematic analysis identified factors which had influence the formation of personal-professional position of a pharmaceutical professional and realization of their personal resources [76-79]. On the basis of theoretical analysis of the process of professional development there will be developed a set of common criteria for the assessment of the effectiveness of this process, based on which will be identified the regularities of formation, reflecting its focus and dynamics: their interest in profession of choice, changes in choice making motivation, growing job satisfaction, increasing the desire to acquire more knowledge and professional skills and making appropriate adjustments in their career goals [80-82].

Based on the theoretical analysis of the main approaches to the study of the process of professional development, taking account the concept of pharmaceutical assistance, a set of related criteria for the effectiveness of this process. Based on common performance criteria, the patterns of formation are revealed, reflecting its direction and dynamics: interest in the chosen profession, changing the determinants of choice motives, increasing satisfaction with choice of profession and work, increasing motivation for cognition and continuous professional development, changing career planning goals. On the basis of specific criteria, the specifics of the formation are revealed, which include: incomplete correlation of the internal resources of the individual with the needs of the pharmacist / pharmacist profession, insufficient

awareness of individual aspects of future activities, the difficulties of production adaptation, and low satisfaction with the work of pharmaceutical professionals [83-85].

A systematic analysis will identify factors which influence the formation of personal-professional position of a pharmaceutical professional and realization of their personal resources. On the basis of theoretical analysis of the process of professional development there will be developed a set of common criteria for the assessment of the effectiveness of this process, based on which will be identified the regularities of formation, reflecting its focus and dynamics: their interest in profession of choice, changes in choice making motivation, growing job satisfaction, increasing the desire to acquire more knowledge and professional skills and making appropriate adjustments in their career goals [86-88].

Deficiency of knowledge and functions of pharmaceutical professions in Georgia is not exists only in the non-medical section of the society, but also in the medical staff like health-care specialists.

Developing a continuous pharmaceutical education system, will enhance the professionalism of pharmaceutical personnel. Protecting the people is the primary goal of pharmacy boards. On a broad scale, this mission requires a pharmacist to attend university for a specific number of years and to pass the state competency examination. Boards also set the parameters for what happens if a law or regulation is violated, what penalties result, and what infractions can cause if a pharmacist lose his or her license [89-90].

Pharmacy is one of the most regulated professions in the western countries and pharmacist profession is one of the most ethically challenging position. In EU countries state boards regulate, administer and influence every phase of pharmacy practice, including the demands and licensing testing for pharmacist. In western countries each state board is staffed up of pharmacists who come from every practice area – hospitals, clinic, chains, independent pharmacies, pharmaceutical factory, industrial pharmacy – as well as at least one consumer (non pharmacist) representative. In most states, pharmacy board members are appointed by the government [91-92].

The health care brigade composes of the patient and all the health care professional specialists who have liability for patient care. This health care brigade demands to be well determined, and cooperation needs to be actively sought. Pharmacists have considerable character and role to play in this brigade. Pharmacists must demand to acclimatize their skills, knowledge, information and attitudes to this innovated role, which consolidates all traditional pharmaceutical sciences with hospital/clinical aspects of the patient care, clinical/hospital skills, management, administration and communication skills, active cooperation with medical brigade and

solving of drug-related issues. If they are to be recognized as full members of the health care brigade, pharmacists will demand to adopt the essential attitudes required by health professional specialists laboring in this space: visibility, liability, duty, responsibility, accessibility in a working practice targeted at the general population, commitment to confidentiality and patient orientation. Pharmacists will demand to be competent, qualified, knowing and possess all that vision, opinion and a voice to fully integrate themselves into the health care brigade [93-94].

To provide contribution and assistance in teaching of patients to understand the prescribed drugs intake rules, pharmacists need in deep knowledge in basics of medicine, pharmacology, pharmacotherapy, pharmaceutical chemistry, pharmaceutical care, clinical pharmacy and other pharmaceutical disciplines. Properly educated pharmacists have great importance and value for the provision higher quality health care services, for the provision higher quality pharmaceutical care and very essential for patient's safety. About half part of the respondents considered that pharmacist is not responsible for registration of adverse effects of the drugs, while less than a third part of them considered pharmacist to be responsible for that. By legislation one of the functions of pharmacist is to register the side effects of drugs, what is very essential for patients' safety. It should increase the awareness of pharmacist as the health professional [95-97].

In western countries are actively working clinician pharmacist, pharmacist and family doctor system, it plays an important role in pharmaceutical care. In western countries and in many developing countries pharmacist professions a regulated sector in health, as well as family medicine. Pharmacist, as well as the family doctor, needs higher education, further Diploma, and continuing pharmaceutical education, Pharmacist's license and periodic accreditation. in pharmacy, on pharmacists position works only higher pharmaceutical education specialists, Who graduated by the state recognized and accredited universities, and colleges. In Georgia pharmacist further diploma, continuing pharmaceutical education, pharmacist licensing and accreditation regulatory legislative base is not perfect. Today, the pharmacist profession in Georgia is impaired, pharmacist profession is deleted from health adjustable medical fields, Therefore degree in pharmacy or higher education in pharmacy losing profession opinion and values. In Georgia not conducted pharmacists certification, re-certification, accreditation and licensing state programs. Therefore profession pharmacist specialty becomes given position by the pharmacy owner, and not only from the university awarded qualification. Because of the above reasons in Georgia in drugstores for pharmacist position is no longer necessary higher pharmaceutical education, in drugstore any person has the right to work as a pharmacist position, any

educated person or a person without medical or pharmaceutical education may be given a "position" Pharmacist "according pharmacy owner desired, pharmacy profession granting needs 4-5 year study at medical and other universities. In Georgia drugstore pharmacist interpreted as the only drug-dealer-seller. Pharmacist as regulated medical specialists ignored in Georgian Health-care System. That is why higher pharmaceutical education system should be moved to a new model direction, which will be more focused on pharmacotherapy, pharmaceutical care, and clinical pharmacy. Therefore, in future pharmacist profession in Georgian health care system should become most important link. In the state health policy, it is necessary to develop pharmacist profession's concepts and common principles. Pharmacist profession should become regulated health care job, look like family doctor. In Georgia should be developed and implemented pharmacists registration, licensing, and accreditation new standards accordance with international pharmaceutical programs. Also qualified pharmacist in Georgia should have the right to work as pharmacist in other European Countries. Georgian pharmacist Certificate should have recognition in western countries, and Georgia should create pharmacist registration standard which is exist in Great Britain and other Western countries [98-101].

The pharmacist specialist should play a main role in the provision of advice and information to patients and the general public on the use of drugs, and the pharmacist should cooperate effectively with prescribers to ensure a common approach to patients in the provision of advice and information. Pharmacists must participate in a multidisciplinary approach to promotion of the rational use of medicines. Pharmacists should adequately inform patients and the general public about unwanted effects of medicines, and should monitor such unwanted effects and their consequences in collaboration with other health care professionals and the appropriate authorities. Pharmacists provide education on medications, disease states and lifestyle issues, all of which is part of clinical prevention. Pharmacist also provide educational programs to groups on issues such as drug abuse or other health issues that are example of population health activities. Pharmacists provide counseling on a wide range of health promotion products found in the typical retail pharmacy such as sun screens, dental hygiene products, or vitamin and mineral products. Moreover, pharmacists provide immunization services and participate in screening activities [102-105].

Although the number of pharmaceutical products on the market is increasing, access to essential medicines is still lacking in many parts of the world. Rising health care costs and changing social, technological, economic and political environments have made health care reforms necessary throughout the world. New advances are needed at individual and at population level to provide safe and effective

pharmacotherapy to patients in an ever more complex atmosphere. Pharmacists are in an excellent position to meet the need for professionals to assure the safe and effective use of medicines. To do so, pharmacists have to take bigger responsibility than they currently do for the management of drug therapies for the patients they serve. This responsibility goes well beyond the traditional dispensing activities that have long been the mainstay of pharmaceutical practice. While supervision of the routine medicine's distribution process must remain the responsibility of pharmacists, their direct involvement in medicine distribution will decrease, since these routine activities will be handled by qualified pharmacy assistants. However, the number of supervisory activities will increase. Thus, pharmacists' responsibilities must be expanded to include monitoring therapeutic progress, consulting with prescribers, and collaborating with other health care practitioners on behalf of patients. The movement towards by pharmaceutical care is a main critical factor in this process [106-107].

Pharmacists possess the potential to improvement the therapeutic outcomes and patients' quality of life within existing resources, and should position themselves appropriately within the health care system. Pharmaceutical education has a corresponding liability to produce graduates who are competent to deliver pharmaceutical care. Outcome competencies aid to quality guarantee by providing readily accessible standards against which practice may be measured. The role of the pharmacist specialist takes different forms in various parts of the world. The pharmacist's participation with pharmaceuticals can be in research and development, formulation, manufacturing, quality guarantee, licensing, marketing, distribution, storage, supply, information management, dispensing, monitoring or education. Supply chain management and information management activities have been termed "pharmaceutical services" and continue to form the basis of pharmacy practice [108-110].

Community pharmacists work at the forefront of medical care. They work at their own pharmacies or in private pharmacies. Pharmacist job is all about helping the public, assessing their conditions and make decisions about medicines. Pharmacists participate in the distribution of medicines and patients offering advice and practical help to maintain healthy. This is a very demanding job and pharmacists usually highly respected members of their communities. Changes in the role of the pharmacist and pharmacy community are medical supplies, and these trends will continue to accelerate in this fast-moving environment. Today in drugstores offer advanced medical services in retail and also ideal for raising awareness of the disease and deliver educational information at multiple points of contact. These include over the counter (OTC) and the personal care aisle, a pharmacy counter, in specialty publications and pickup areas prescription. Not only useful for customers' pharmacies these innovations, but they

also create opportunities for pharmaceutical marketers, measurable return on investment [111-113].

Educational focus of professional programs is increasingly recognized the need for an opportunity to apply what they have learned in the classroom through laboratory simulations or experiential learning, which requires different types of faculty and staff positions to meet these educational needs. Innovative types of faculty and staff positions with great attention to training or practice and less responsibility for traditional research appeared in PharmD programs and we should encourage graduate's pharmacies carry these roles. At the same time, we should encourage graduates to conduct PharmD degrees in masters or doctoral level philosophy or advanced science-based scholarships to become the next generation of teachers, providing the basis for and research in biomedical, pharmaceutical, clinical and administrative sciences in pharmacy programs [115-117].

What is being done especially in the Academy and the health professions education programs to promote these career opportunities for pharmacy students? Pharmacy educators need to become more actively involved in the development of special educational opportunities to prepare a new generation of faculty and staff and to review the types and nature of faculty and staff positions in our institutions in order to attract graduates to participate in the Academy. Pharmacy graduates are also encouraged to explore the potential role of other medical and scientific educational programs, given the increased attention to inter-professional teams in health professions education is essential for high-quality patient care [118-119].

Problems of Georgian pharmaceutical education in the coming years are to prevent easy access to the pharmacy program graduates of other subjects; possibility of a lack of jobs for graduates of pharmacy; potential for accelerated progression pharmacist. In addition, the requirement to introduce a greater number of drugs in the courses to meet the new roles of additional and independent lawmakers need to be addressed at the same time debating the relative weight of the science and practice in the course. Along with efforts to improve the professional status of the Georgian pharmacists, internal and external factors that affect their level of satisfaction, should be explored further in a larger population so that appropriate strategies can be adopted to improve the situation [120-121].

The public and our patients should expect the highest possible pharmaceutical care from professional practitioners worldwide, without exception. The obviously evidence and confidence of competence, skills and capability that is corresponding with accelerating and master practice is a clear message to fostered public that pharmacists have this competence; professional distinction, credentialing and quality convinced of

specialization are part of this evidence of competence, potential and capability. It is in the interest of patients, health systems and to pharmacists' profession that develop a common and shared understanding of what we mean by specialism and by forward practice". This is a key supervisor for future workforce perfection [121-123].

Education and advancement of long-term education are the cornerstones of the future pharmacy - today's students are supervisor in the pharmacy of tomorrow. This means that all parties involved in pharmaceutical education have a great responsibility for mastering new approaches and view for the training of future health care workers. Academic pharmacy must take a powerful position in forecasting essential changes in the world and developing strategies for improving the teaching of pharmacy in the interests of everyone's health. One of the most significant aspects is the development of knowledge, cognition and experience in the academic workforce [95, 98, 105].

A pharmacist a health care professional, which distributes medications to patients on prescription, on the order of a physician or another doctor. Pharmacists have a deep knowledge of the chemistry and Pharmacotherapy of different drugs and how they react to people, as well as how drugs interact with each other. Pharmacists must accurately measure and a package of medicine, providing its dosage and security due to the patient. While the pharmacist typically does not choose or prescribe medication, the pharmacist educates patients on how to take the medication and what reactions or problems should be avoided. Pharmacists also known as chemists (druggists) or they are health care professional specialists who working in pharmacy, medical sciences, health care, focused on the safe and effective use of drugs. A pharmacist is a part of the health care brigade straight engaged in patient care. Pharmacists are trained at the university grade degree level, to understand the biochemical and pharmacological mechanisms of effect of drugs, the use of drugs and therapeutic roles, side effects, possibility drug interactions, and inspection parameters. Pharmacists interpret and transmit this experience for patients, physicians and other medical professionals. Among other requirements for licensing in different countries require pharmacists to hold either a Bachelor degree of Pharmacy or Doctor of Pharmacy degree. The most general pharmacist positions that of the general pharmacist (also referred to as first-line retail pharmacist or pharmacist) or a hospital/clinic pharmacist, where they instruct, teach, advice and counsel on the correct use and side effects of drugs and medicines. In most countries, the profession of pharmacist is subject to professional regulation. Depending on the legal framework of practice, pharmacists may promote to the destination (also known as pharmacist legislator) and the introduction of certain medications (eg, immunization) in some jurisdictions. Pharmacists can also practice in a diversity of other directions, including industry,

studying, factories, wholesale trade, academia, research, universities, insurance, the military and government [9, 37, 68].

Pharmacists should see themselves as the main health care providers who can use their clinical experience in various public institutions. Pharmacists will always be an important health care provider based on their availability to patients through community pharmacy setting. This specific role of provider should never be reduced, as it serves the critical needs of patients (eg, dispensing and counseling for drug experience in nonprescription drugs , compounding, vaccinations, and the use of medication administration or monitoring devices) that not addressed by other health care providers. However, this does not exclude pharmacists serving as suppliers of innovative alternative settings, such as outpatient clinics located in pharmacies and other retail outlets; in independent practice with a focus on medication management therapy, medication reconciliation, drug counseling or Pharmacogenomic; institution or organization, where they are responsible for the integration and promotion of patient care through the many other health care providers to facilitate continuity of care community; or organizations that coordinate research to improve practice through pharmacy practice based research networks [31,39,42,96]. Pharmacy providers should look for opportunities to engage in professional activities between patient care, when and where they occur or as they develop in communities. For example, alternative practices may change to concentrate on providing pharmacy and health services for adults and retirement communities, given the growing number of them as Georgian population continues to age. Pharmacy graduates who serve in the health services of Georgia, as these pharmacists to develop innovative practice settings, they should be drivers for expansion within the pharmacy practice in community, state and national levels. Pharmacy educators must ensure that graduates have the necessary knowledge, skills, attitudes/values, and practice experience, as well as confidence, drive, and entrepreneur spirit to be a driving force for change in order to facilitate these and other advances in the scope and type of community pharmacy practice. Hospitals and other institutions and facilities, such as outpatient clinics, drug-dependency treatment facilities, poison control centers, drug information centers, and long-term care facilities, may be operated by the government or privately. While many of the pharmacist's activities in such facilities may be similar to those performed by community pharmacists, they differ in a number of ways. Additionally, the hospital, clinic or institutional pharmacist has more possibility to interact closely with the prescriber and, therefore, to promote the rational prescribing and use of drugs in larger hospital and institutional pharmacies, is usually one of several pharmacists, and thus has a greater opportunity to interact with others, to specialize and to gain greater

expertise, having access to medical records, is in a position to effect the option of drugs and dosage regimens, to monitor patient compliance and therapeutic response to drugs, and to recognize and report adverse drug reactions; can more easily than the community pharmacist assess and monitor patterns of drug usage and thus recommend changes where necessary serves as a member of policy-making committees, including those concerned with medicine choice, the use of antibiotics, and hospital infections and thereby actions of the preparation and composition of an essential-drug list or formulary is in a better position to educate other health professionals about the rational use of drugs, more easily participates in studies to determine the beneficial or adverse effects of drugs, and is involved in the analysis of drugs in body fluids ,can control clinical manufacture and acquisition of drugs to ensure the supply of high-quality products, takes part in the planning and implementation of clinical trials [33, 34, 49].

Patient safety is a priority for all professionals - pharmacists - who care about the health. Patient safety is defined as the prevention of harm to patients, including by errors. For centuries, pharmacists were guardians/safeguards against "poisons" of substances that can cause harm to society. Now more than ever, pharmacist's responsibility is receiving safely the medication to the patient [13, 29, 98].

Pharmacy is one of the most regulated professions in the EU countries and one of the most ethically challenging. Government boards of pharmacy regulate, administer and influence every phase of pharmacy practice and activities, including the requirements and testing to become a licensed and certified pharmacist. Each country board is made up of pharmacist specialists who come from several practice area – academic, hospitals, clinic, chains, general and independent pharmacies – as well as at least one consumer (nonpharmacist) representative. In most states, pharmacy board members are appointed by the government [10, 46, 64].

Protecting the society and people is the primary purpose of pharmacy boards. On a broad scale, this mission demands a pharmacist to attend school for a specific number of years and to pass the state competence examination. Boards also set the parameters for what happens if a law or regulation is violated, what penalties result, and what infractions can cause a pharmacist to lose his or her license.

Developed countries and many developing countries in the field of pharmacy are regulated, as well as family medicine. The pharmacist as family doctor needs of higher education, post-graduate and continuing education in pharmacy, a pharmacist license and periodic accreditation. In pharmacy, allowed to work only with higher pharmaceutical education specialists who have graduated from state-recognized and accredited colleges. The opening of a pharmacy permit is issued only to a person of higher pharmaceutical education, who passed the diploma courses in pharmacy and

earned the right to open the pharmacy [52, 66, 85].

It should be noted that in developed countries and in many developing countries pharmaceuticals are regulated profession, as well as family medicine, pharmacist as a family doctor, need higher pharmaceutical education, diploma and continuous pharmaceutical education, pharmaceutical license and periodic accreditation. Only pharmacists with higher pharmaceutical education have the right to work as pharmacists in pharmacies, who have graduated from universities recognized and accredited by the state.

In March of 2016 the Board of the pharmacy practice adoptive the ensuing determination of a "pharmacist": A pharmacist is a scientifically- educated graduate healthcare professional specialist, who is an expert in all aspects of the deliver and use of medicines. Pharmacists guarantee access to safe, cost-effective and quality medicines and their responsible use by individual patients and healthcare systems [48, 49, 56, 87, 96].

Pharmacist are health practitioner who dispenses medicinal products. A pharmacist can counsel on the proper use and adverse effects of drugs and medicines following prescriptions issued by medical doctors/health professionals. Education includes university-level training in theoretical and practical pharmacy, pharmaceutical chemistry or a related field [6, 19, 41].

Pharmacists' expanding role in self-care is the subject of a new report from FIP. Pharmacy is a entrance to care: assistance people towards better health regard the present state of consumer interest in health care and presents a collection of testimony of pharmacy services related to self-care and the value that pharmacists carry to health care systems in this route. It lays out the drivers of self-care and profound changes in the route health care systems operate [65, 84, 87].

Responsible use of medicines implies that health-system stakeholder activities and capabilities are aligned to ensure that patients receive the right medicines at the right time, use them appropriately, and benefit from them. Bringing the right drugs to the patients who need them demands the engagement of all actors, including state, governments, and a vision on how to integrate society, public, people and private interests and to mobilize resources. While appropriate drug therapy is safer and more cost-effective than other treatment alternatives, there is no doubt that the personal and economic consequences of inappropriate drug therapy are enormous. It is important for public and people to be guaranteed that spending on pharmaceuticals represents good value for money. In view of their extensive academic background and their traditional role in preparing and providing medicines and informing patients about their use, pharmacists are well positioned to expect responsibility for the management of drug

therapy. [48, 49, 75].

Pharmacists, as well noted as druggists, who are health care team professionals, they working in pharmacy (drug-story), the field of health sciences focusing on safe and effective using drugs. The pharmacist is a part of the health care team directly engaged with patient care services. [1, 2]. The pharmacists hold university degree level training and education to consider the pharmacological mechanisms and actions of drugs, pharmacology, pharmacotherapy, toxicology ,drug uses, therapeutic roles, side effects of drugs, possible drug interactions, and checking parameters [3]. This is engaged to Botany, biology, anatomy, chemistry, physiology, histology, Biophysics and pathophysiology. Pharmacists interpret and communicate this particularized information to patients, physicians, doctors and other health care producers [11, 29, 54].

Being a health care professional means being part of a team that is focused on one goal: helping the patient achieve better health. Pharmacists are a part of this health care team, and their duty is to help the patients make the best use of their medication. This is a big job one that pharmacists cannot do alone. Thus, within their profession, pharmacists have developed other categories of pharmacy workers to help get the work done more efficiently and allow pharmacists to be more focused on the patient [28, 35, 49].

Common pharmacies have been providing health care for many years, via giving consultation, advice, providing and delivering medicine when needed, or referring patients to other health care professionals. This report, however, reflects and represent the embedding of a formalized approach whereby pharmacies are covering for these services, and where self-care through pharmacists is measured as an integral part of the health system.

Pharmacists are health professionals who are dispensing prescription drugs to patients, also provide information about the medicines ordered by doctors. They explain the doctors' instructions to patients so that, people can safely and effectively use these medications. Another big issue is ensuring that drugs are used reasonably and rationally. This demands that patients get drugs assign to their clinical/hospital necessity, in doses that meet their own individual needs for the sufficient period of time, and at the lowest cost to them and their public [41, 74, 85].

A pharmacist is a personality who is professionally competent and qualified to prepare and dispense medicine. The Pharmacist dispense drugs, check patient's health, and make sure that drugs do not interact in a harmful route. Pharmacist are drug experts eventually interested about their patients' wellness and health. Public health service interventions, higher level pharmaceutical care, rational pharmacotherapy and effective medicines supply chain management are main components of an accessible,

sustainable, affordable and equitable health care system which ensures the efficacy, safety and quality of drugs. It is clear that pharmacy has a great role to play in the health sector reform process. To do it so, although, the role of the pharmacist needs to be redefined and reoriented. Pharmacists have the capability and possibility to enhance therapeutic results and patients' quality of life within accessible resources, and must position themselves at the forefront of the health care system. The movement towards pharmaceutical care is a critical factor in this matter. While efforts to communicate the proper information to patients are as significant as providing the medicine itself. Pharmacists also have a vital contribution to make to patient care through managing pharmacotherapy and concurrent non-prescription or alternative therapies [17, 28, 86].

Pharmacists are taking an important role to support people obtain the best results from their medications. The results of care are improved and costs are reduced when they are involved in pharmaceutical assistance, the treatment of patients and patient care. Pharmacists are also available with for all people can talk to face-to-face without an appointment. Communicate effectively to assess factors that may affect a patient's ability to take medicine. Pharmacists are the medication specialists on the health-care team. Work in a wide range of medical institutions and have flexible hours. Pharmacists Help people live healthier, better lives. Over the past 40 years, the pharmacist's role model has changed from that of compounder and dispenser to one of pharmacotherapy manager. This involves responsibilities to guarantee that wherever medicines are provided and used, quality production are selected, procured, stored, distributed, dispensed and administered so that they contribute to the health of patients, and not to their harm. The framework of pharmacy practice now includes patient-focused care with all the cognitive functions and features of recommending, providing information about drug and monitoring pharmacotherapy, as well as technical aspects of pharmaceutical services, including medicines deliver chain management. It is in the additional role of managing pharmacotherapy that pharmacists can now make an essential assistance to patient care [10, 39, 48].

Pharmacists have a lot of public health functions that can benefit from the unique experience of pharmacists, which may include pharmacotherapy, pharmaceutical care, and pharmacy assistance. In addition to dispensing medicines, pharmacists have proved to be an accessible resource for information on health and medicines [11, 67]. The centralized position of the pharmacist in the society and clinical competence are invaluable. It is important to review and integrate public health practices into pharmacological training and pharmaceutical care. Encouraging cross-training will also increase the resources and help meet the needs of the workforce in the fields of pharmacy and public health. Purpose The American Public Health Association has

strongly supported the role of the pharmacist in public health. Through Trans disciplinary approaches, it is assumed that the pharmacist's contribution to public health, health care, health education, disease prevention and health promotion, public health promotion and the quality of health will help in achieving optimal public health outcomes [28, 36, 57].

As pharmacists proceed to become more clinically-oriented health care professionals, with increased responsibilities, liability and accountabilities for pharmaceutical care clear pathways for workforce development, coupled with professional recognition and credentialing of practitioners, is an important consideration. This represents a clear opportunity for transnational collaboration and further opportunities for transnational recognition of advanced capabilities for the pharmacy workforce. An obviously display and assurance of competence and facilities that is well-proportioned with progressive and expert practice is an obviously message to fostered public that pharmacists own this competence; occupational recognition, credentialing and quality assured specialism are part of this to show of competence, skills and capability. There is in the interest of patients, health systems and pharmacist profession that were develop a common and shared understanding of what we mean by specialization and by innovative practice. This is a key driver for future workforce perfection [49, 56, 57, 60].

The rational use of drugs remains the exception rather than the rule. For those people who do take medicines, more than half of all prescriptions are incorrect and more than half of the people involved fail to get them correctly. In additive, there is growing concern at the increase in the global spread of antimicrobial resistance, a major public health challenge. The global trend is for pharmacy to continue to become a more clinical, patient-facing profession, with enhanced responsibilities and accountabilities for pharmaceutical care in clinical environments; hence, clear pathways for workforce development, coupled with professional acknowledgment and credentialing of practitioners, becomes an important consideration. There is a clear opportunity for transnational collaboration and further opportunities for transnational recognition of advanced skills, capabilities for the pharmacy workforce management [48, 89, 58, 59, 67].

Pharmacy is a so elder profession and has changed deeply over the years. It is a dynamic, growing, and increasingly diverse profession, one which creates an excitement because there are so many opportunities for service. The secret in the future will be to identify and take advantage of these opportunities. In patient-centered health care, the first challenges are to identify and meet the changing needs of patients. Pharmacists need to ensure that people can access medicines or pharmaceutical advice easily and, as far as possible, in a way and at a time and place of their own choosing.

They can empower patients by engaging them in dialogue to communicate knowledge which enables them to manage their own health and treatment. Although patients are exposed to a wide range of information from package inserts, promotional materials, advertising in the media and through the Internet, this information is not always accurate or complete. The pharmacist can help informed patients to become accurately by offering unbiased relevant evidence-based information and by pointing to reliable sources. Counselling on disease prevention and lifestyle modification will promote public health, while shared decision-making on how to take medicines through a concordant approach will optimize health outcomes, reduce the number of medicine-related adverse events, cut the amount of medicine which is wasted and improve adherence to medical treatment [67, 85, 93].

The pharmacists are the health vocational specialists most accessible to the society. They deliver medicines according to with a prescription or, when legally permitted, sell them without a prescription. In addition to ensuring an accurate deliver of appropriate products, their professional activities also cover counselling and advising of patients at the time of dispensing of prescription and non-prescription drugs, drug information to health professionals, patients and the general society, and participation in health-promotion programs. They maintain links with other health professionals in fundamental and primary health care. Today, an increasingly wide range of new and analogous products are used in medicine, including high-technology biological products and radio-pharmaceuticals. There is also the mixed group of medical devices, which contains some products analogic to medicines, some of which demand special knowing and information with regard to their uses and risks (e.g., dressings, wound management products, etc.). Pharmacists have gradually and progressively undertaken the additional task of ensuring the quality of the products they deliver [42, 49, 62].

Anywhere is the necessity for this infrastructure more evident in the day-to-day management of patients than in the delivery of essential drugs. Indeed, effective drug can be practiced only where there is efficient drug management. This is an axiom that applies with equal validity to both developed and developing countries. Yet, time and again, in less affluent settings, inadequacies in the provision of primary health care are attributable to short comings within the drug distribution management chain. Only when the pharmacist has been accepted as a vital participant of the health care team can the necessary supporting services be organized with the professionalism that they demand. In highly western countries, acceptance of the need for professionalism in the supply and dispensing of drugs and health appliances has long since been indispensable because of the complexity of modern health care technology. Recently, however, a

striving for economy engendered by the ever-burgeoning costs of health care within the public sector has lent much credence and immediacy to arguments that a redetermination of the role of the pharmacist could serve the interests of both individual patients and the public at large. the pharmacist serves as a member of a multidisciplinary team rather than in an autonomous capacity; but in any particular country the profession can only be an efficiently organized element of the health care system when it has gained representation within the senior ranks of administration in both government and industry, and when pharmaceutical education has become established at university degree level. A voice in national administration is of vital significance from the outset, since this not only promotes the potential of the profession and exerts influence upon training curricula and the academic standards required for registration - and for certification of ancillary staff - but also provides the best available assurance that policy considerations, including resource allocation, will be attuned meaningfully to national requirements. Similarly, the pharmacist has indisputable functions at various levels in national drug registration and regulation. The responsibilities of the regulatory authority are to ensure that all products subject to its control conform to acceptable standards of quality, safety and efficacy; and that all premises and practices employed to manufacture, store and distribute these products comply with requirements to assure the continued conformity of the products to these standards, until such time as they are delivered to the end user. A small regulatory authority will seldom, if ever, undertake independent, comprehensive evaluations of the safety, effectiveness and efficacy of individual products. In this case, the administrative and technical responsibilities that fall within its ambit are largely of a pharmaceutical nature and they are directed primarily to quality assurance. In the last analysis, however, whereabouts pharmacy establishes its roots as a profession, it is within the health care establishments, institutions and in the community itself that pharmacists will serve in greatest numbers and with the most immediate and instant effect on patient welfare. Pharmacists' particularized knowledge, information of the management and properties of medicines in an increasingly complicated health care environment brings them closer to prescribing doctors as a source of independent information about therapeutic options and about the results - both positive and negative - of treatment. It also yields them closer to patients in the society as readily accessible dispensers not only of drugs but also of health-related information. Their basic training should aim to confer upon them competence to offer skilled advice on the treatment of minor illness and the adoption of healthy lifestyles, and it should endow them with the insight necessary to recognize when the best interests of the patient are served by prompt referral to a medical practitioner [15, 47, 59, 64].

Under some model of care, physicians generally head the healthcare team, while the pharmacist enters the patient care continuum after the prescription has been written. Delivering the right drug, identifying the correct dosage and times it is to be taken, labeling it clearly, and listing potential side effects are all part of the pharmacist's well-known responsibilities. But today's drugs are considerably more complex than they once were – and with genomes, biotech and genetic compounding, drug therapy stands to grow even more individualized over the next ten years. The pharmacist's role is concurrently expanding. Maximizing the safety of medications is an increasingly critical responsibility of practice. It is the pharmacist's task to be sure the patient knows the name of the drug, what it is for, how and when it is to be taken, how to minimize possible interactions with other drugs (prescription or OTC) and foods, and optimal storage. Asking open-ended questions like "What has the doctor told you about this medication?" helps. But even where the prescriber or nurse has explained, the patient may not have heard or perhaps didn't understand, making the pharmacist a critical checkpoint [42, 48, 79].

Community pharmacists have an important role in medication counseling and health education as they are often the first points of contact for patients and care within the healthcare system. Pharmacists play a key role in helping patients maximize their pharmaceutical care. For example, it is estimated that up to fifty percent of all patients on medication for hypertension do not have their pressure under control because they lack regular follow-up. Pharmacists are ideally suited to track individuals on these medications and help them obtain proper follow-up. Americans are typically in their local pharmacy at least once or twice a month. Many come in weekly. It is apparent how convenient it is to have blood pressure machines set up, so patients can check their numbers and have the pharmacist explain what those numbers mean. As part of the healthcare team, the pharmacist can act as a support system in disease management programs. Some interesting new models for care are evolving. One that model has pharmacists selecting from agreed-upon therapeutic options and then working directly with the patient to maximize outcomes. Physicians might prescribe not a specific product, but an outcome – say, the desire to lower blood pressure to a specific level with pharmaceuticals [19, 29, 61].

Pharmacists' liability and duty involve a variety of care for patients, from dispensing medications to monitoring patient health and progress to maximize their response to the medication. Pharmacists as well educate, train, consult consumers and patients on the use of prescriptions and over-the-counter drugs, and advise all physicians, family doctors, nurses and other healthcare professionals on drug decisions. Pharmacists deliver competence on the composition of drugs, including their physical,

chemical, biological and mechanical properties, as well as their manufacture, production and use. They guarantee drug purity and strength and make sure that drugs do not interact in a harmful route and technique. Pharmacists are the drugs experts finally associated about the patients' wellness and health. Pharmacists monitor and check patients' health, dispense medications, and make sure that drugs do not interact in a harmful way. They are drug expert specialists: Ultimately concerned about patients' health and wellness [25, 29, 57].

Traditionally, pharmacists have safeguarded public from "poisons" and other substances that could cause harm to the people. But now, more than ever, pharmacists are charged with the duty and responsibility to ensure that when a patient receives and uses a drug, it will not cause harm. The overall pharmacist goal is drug safety challenges is to reduce the medication errors and medication associated harm by 50% in the next five years, worldwide. The goal is to stimulate action, create new policies (and services – points of advocacy for national pharmacy associations) at country and international level in four areas: patients, medicines, health care professionals and health systems and practices of medication. According to the World Health Organization (WHO) preventing errors and the harm that results require putting systems and procedures in place to ensure the right patient receives the right medication at the right dose via the right route at the right time. The dispute and challenge aims are to enhance in each stage of the medication use process including prescribing, dispensing, administering, checking, controlling, monitoring and using. World Health Organization aims to provide guidance and develop strategies, plans and tools to ensure that the medication process has the safety of patients at its core, in all health care facilities. This precondition is in line with the roles that pharmacists play according the FIP-WHO Good Pharmacy Practice [17, 59, 86].

*A pharmacist is a scientifically- educated graduate healthcare professional who is an expert in all side of the deliver and use of medicines. Pharmacists assure access to safe, cost-effective and quality of drugs and their responsible use by individual patients and healthcare systems. The number of medicines on the market has increased dramatically over the last few decades, bringing some real innovations but also considerable challenges in controlling the quality and rational use of medicines. In industrialized and developing countries alike, striving to provide health care, including pharmaceutical care, are casing of new challenges. These include the rising costs of health care, limited financial resources, a shortage of human resources in the health care sector, inefficient health systems, the huge burden of disease, and the changing social, technological, economic and political environment which most countries face. While globalization has brought countries closer together in trade of products and*

services and in recognition of academic degrees and diplomas, for example, it has led to rapid changes in the health care environment and to new complexities due to increased travel and migration [17, 39, 42].

Over the past 100 years there has been a tendency in pharmacy practice to move away from its original center on medicine produce towards a more inclusive focus on patient care. The pharmacist role has developed from that of a compounder and supplier of pharmaceutical products towards that of a provider of services and information and eventually that of a provider of patient care. Increasingly, the pharmacist's mission is to ensure that a patient's pharmacotherapy is properly indicated, the most effective available, the safest likely, and convenient for the patient. By taking straight responsibility and duty for individual patient's medicine-related needs, pharmacists can make a unique assistance to the outcome of the pharmacotherapy and to the patients' quality of life. The new accession has been given the name pharmaceutical care. The practice of pharmaceutical care is new, in contrast to what pharmacists have been doing for years. Because pharmacists often fail to assume responsibility for this care, they may not adequately document, monitor and review the care given. Receiving such responsibility is vital to the practice of pharmaceutical care [13, 19, 58].

The new style, roles, skills, regards and attitudes which pharmacists need mastering if they are to become members of multi-disciplinary health care teams, as well as the added benefits which they can provide through their professional input. It also explores the challenges which pharmacists face and the indefinite opportunities accessible to them to assume leading roles in patient-focused and public health efforts. In some cases, these challenges may involve an expansion of existing roles; in other cases, they may require pharmacists to adopt new roles previously considered beyond the scope of traditional pharmacy practice.

Digital health is a discipline that uses software and hardware to improve health and healthcare. The digital health field broadly includes mobile health, telemedicine (or telemedicine), wearable devices, and health information technology. Recent advances in digital technology offer the opportunity to expand healthcare delivery. For example, a growing number of people living in rural areas with limited access to healthcare could benefit from rapid intervention from telehealth providers. More and more doctors can easily access patient records, communicate with them, and monitor disease management through their smartphones, mobile apps, and available software. Pharmacists also use digital technologies in their practice. They used phones, mobile apps and remote monitoring devices to improve treatment adherence and outcomes, educate patients and monitor their symptoms remotely. Pharmacists also provide computer- or Internet-based interventions to improve hypertension treatment and

reduce medication errors and side effects. Sometimes, they used several technologies in their interventions. Specifically, pharmacists conducted in-person consultations (based on an online program or technology platform) and telephone follow-ups to effectively communicate, educate, and manage patient health concerns. Thanks to the benefits of technology, digital healthcare is becoming more and more popular. Pharmacist-led digital interventions. Compared to traditional care, all interventions delivered by telephone, computer, Internet or smartphone had greater economic benefits. The video intervention was not cost-effective, perhaps because it was not intensive enough to improve compliance. Economic evaluation of digital interventions can support evidence-based clinical decision-making. Pharmacists can use data from these economic evaluations to decide whether to implement technological tools in their practice. Additionally, these data can be considered in a value-based reimbursement system, since economic value is one of the important factors influencing access to healthcare [74, 88, 94].

Adverse drug reactions are one of the most common problems faced by physicians and pharmacists. Most often, undesirable side effects occur from the use of the following pharmacological groups: oral anticoagulants, cardiac glycosides, oral antidiabetic drugs, statins, aspirin, paracetamol, amiodarone, antidepressants. European countries, provide recommendations based on high scientific evidence on the dangers and risks associated with the use of medicines in clinical practice for various diseases and symptoms are connected. The main aspects of rational drug prescription are: making the correct diagnosis; Consideration of pathophysiological findings in the diagnosis; Selection of a specific therapeutic strategy; Choose a specific medication of your choice; Determine the appropriate dosage regimen. Develop a plan to monitor the effects of the medication and determine the course of therapy or treatment. The main directions of the best prescription and clinical practice are the selection of the most effective and harmless drug/drug combination, monitoring patients, prevention of side effects of drugs and related complications on the basis of regular monitoring, appropriate outpatient or instrumental examinations. Adverse reactions to medicinal products (side effects) are one of the most frequent problems for doctors and are often the cause of hospitalization. The reasons for the more frequent development of side effects are: incorrect intake of medications prescribed by the doctor; simultaneous use of drugs characterized by synergism (for example, aspirin and warfarin, antihypertensive drugs); Cytostatic reactions, for example: liver damage developed as a result of acetaminophen misuse; Unologic reactions (eg, quinidine thrombocytopenia, hydralazine-induced lupus erythematosus syndrome); Idiosyncratic reactions caused by genetically determined enzymopathies. The main aspects of

rational drug prescription are: making an appropriate diagnosis; consideration of the pathophysiological results of the diagnosis; selection of a specific therapeutic strategy; determining the appropriate dosage regimen; Developing a plan for monitoring the action of the drug and determining the course of therapy. The drug action monitoring plan includes: observing the effect of the drug and the patient's symptoms; use of laboratory tests; conducting various diagnostic-instrumental studies [11, 26, 39]. Thus, the main directions of the best prescription and clinical practice are the selection of the most effective and harmless drug/drug combination, patient supervision, prevention of drug side effects and drug-related complications based on periodic monitoring of appropriate ambulatory or instrumental examinations.

Pharmacotherapy is the most constantly used form of treatment intervention in any health practice setting. Its use has grown dramatically as the population has aged, the prevalence of chronic disease has increased, new infectious diseases have emerged and the range of effective medications has broadened. In addition, more and more so-called "life-style medicines" – treatments for ailments like baldness, dry skin, wrinkles or erectile dysfunction – are being marketed. Increasingly medicines can be purchased in new settings, and are handled by non-pharmacists. Compounding has been largely replaced by the commercial manufacture of nearly all formulations. Medicines can be bought in supermarkets, in drug stores or at markets. They can also be obtained by mail order or over the Internet, they are sold by medical practitioners and dispensed by computerized dispensing machines [28, 36, 48].

The accountability of health professionals for their actions is another major issue in health care provision. In the traditional relationship between the doctor as prescriber and the pharmacist as dispenser, the prescriber was accountable for the results of pharmacotherapy. That situation is changing in rapidly evolving health systems. The practice of pharmaceutical care assumes the pharmacist to be responsible for patients under their care, and society will not only accept that assumption but hold the profession to it [16, 41, 53].

A pharmacist is a healthcare professional, which has an important role in healthcare in the system. Pharmacists' professional activity also includes counseling patients, providing complete and comprehensive information about the drug to the public. At the same time, they actively participate in health promotion programs and have close communication with other professionals in the health system. Professional services include the application of specialized pharmaceutical knowledge to optimize the care process and improve health outcomes. Examples of pharmacist's professional services includes early screening and testing for chronic diseases, vaccinations, smoking cessation, and monitoring blood pressure, cholesterol, and glucose.

Pharmacy practices respond to the needs of the people who use pharmacist services to provide optimal, evidence-based care, and quality standards are essential. Roles, functions and duties for pharmacists should be considered, which should be reflected in the activities of the pharmacy. The pharmaceutical services - includes the field of activity within which are provided in all pharmacies. These services include: supply of OTC (out of counter) and prescription medicines to patients, pharmaceutical consultation, pharmacotherapy safety and health promotion.

In pharmacies in European countries, the main tasks of pharmaceutical service providers (pharmacists) are: receiving drug prescriptions, checking patients' history and verifying proper dosage and administration methods and compatibility of drugs before dispensing; preparation and labeling of drug forms based on prescriptions; Providing information and advice to patients on drug interactions, incompatibilities and contraindications, side effects, dosage and proper storage; Communicating with other health care specialists to plan, monitor, review and evaluate the quality and effectiveness of treatment for individual patients and to maximize the effectiveness of a particular pharmaceutical product or medication; production of documentation of narcotic drugs, psychotropic medications and accounting in accordance with the requirements of the legislation; Ensuring the storage of vaccines, serums and other medicinal products under appropriate conditions; consultation and provision of over-the-counter medications; Supervise and coordinate the work of pharmacy technicians, pharmacy interns and pharmacy sales assistants. In some countries, pharmacists can take postgraduate specialization in pharmacy. This is the case, for example, in Germany, the Netherlands, Switzerland (where it is mandatory) and the United Kingdom. In Germany, specialization in pharmacy is possible only in the field of general pharmacy. However, specializations are also available in various fields such as geriatric pharmacy, diabetes, homeopathy and more. In the UK and some other countries, clinical pharmacist qualifications are available as a prerequisite for pharmacists to be employed as lead pharmacists [59, 69, 77, 85].

In patient-centered health care, the first challenges are to identify and meet the changing needs of patients. Pharmacists need to ensure that people can access medicines or pharmaceutical advice easily and, as far as possible, in a way and at a time and place of their own choosing. They can empower patients by engaging them in dialogue to communicate knowledge which enables them to manage their own health and treatment. Although patients are exposed to a wide range of information from package inserts, promotional materials, advertising in the media and through the Internet, this information is not always accurate or complete. The pharmacist be able to help informed patients to become exactly informed patients by offering unbiased

relevant evidence-based information and by pointing to reliable sources. Counselling on disease prevention and lifestyle variation will promote public health, while shared decision-making on how to take medicines through a concordant approach will optimize health outcomes, reduce the number of medicine-related adverse events, cut the amount of medicine which is wasted and improve adherence to medical treatment [14, 29, 58].

Pharmaceutical care is a ground-breaking concept in the practice of pharmacy which emerged in the mid-1980s. It stipulates that all practitioners should assume responsibility for the outcomes of drug therapy in their patients. It surrounds a variety of functions and services – some new to pharmacy, others traditional – which are determined and provided by the pharmacists serving individual patients. The concept of pharmaceutical care also includes affective commitment to the welfare of patients as individuals who require and deserve pharmacists' compassion, mercy, concern and trust. However, pharmacists often deny to accept responsibility for this power and extent of care. As a result, they may not adequately document, control and review the care given. Accepting such responsibility is essential to the practice of pharmaceutical care. Pharmaceutical care can be tendered to individuals and publics. "Population-based pharmaceutical care" uses demographic and epidemiological data to establish formularies or drug lists, develop and monitor pharmacy politics, develop and manage pharmacy networks, prepare and analyses reports of drug utilization/costs, conduct drug utilization reviews and educate providers on medicine policies and procedures. Without individual pharmaceutical care, however, no system can manage drug therapy and monitor medicine-related illness effectively. The population-based functions identified by above need to occur either before or after patients are seen and provide useful information, but cannot replace patient-specific services while patients are being seen. Medicine related illnesses occur frequently even with medicines that are in a system's formulary or medicines list, since these medicines are often prescribed, administered or used inappropriately. Patients need pharmacists' maintenances at the time they are receiving care. Successful pharmacotherapy is specific for each patient. It includes individual drug therapy decisions, reaching concordance (an agreement between the patient and the health care provider on the therapeutic outcome and how it may be achieved), and critical patient monitoring activities. For each individual patient's pharmacotherapy treatment, the pharmacist develops a care schedule together with the patient. Patients can then contribute to successful outcomes by taking part of the responsibility for their own care and not relying solely on caregivers, in the former paternalistic style. Pharmaceutical care does not exist in isolation from other health care services. It must be provided in collaboration with patients, physicians, nurses and

other health care providers. Pharmacists are responsible directly to patients for the cost, quality and results of pharmaceutical care does not exist in isolation from other health care services. It must be provided in collaboration with patients, physicians, nurses and other health care providers. Pharmacists are responsible directly to patients for the cost, quality and results of pharmaceutical care [26, 41, 47, 56, 68].

The forces behind the variations in pharmaceutical education are many and varied, and growing in both number and intensity. The major economic and political forces affecting the health care system in the most countries are also having an impact and influence on the practice of pharmacy. As a effect, radical changes are needed in pharmaceutical education. The role and function of pharmacists and pharmaceutical staff need to be reappraised and the educational outcomes of the evolving pharmacy curriculum should be clearly determined. The use of outcomes statements would help to drive curriculum development. Educational outcomes can be used as a new organizing framework that integrates science, professional attributes, interprofessional practice, and professionalism across new major headings of pharmaceutical care, systems management, and public health, as they are in the practice of pharmacy. The educational change will require not only extensive curriculum revision and restructuring, but also a major commitment to faculty development to prepare teachers to educate pharmacists in a different way. The type and depth of didactic and experiential material to be included will be different. The amount and allocation of educational resources will have to change. Schools and colleges of pharmacy should create, establish and evaluate practice models that could be used within evolving health care environments. Courses should take into consideration the needs of the objective audience, learning outcomes, course content, learning and teaching methods, learning resources, participant assessment, course evaluation, and quality assurance when being introduced into the curriculum [46, 95, 114].

Pharmacy practice takes place at different levels. The ultimate aim of activities at all these levels is to benefit patients by improving and maintaining their health. Activities at individual patient level comprise all aspects of providing and managing a patient's drug therapy (i.e., pharmaceutical care, including clinical pharmacy services). At this level, decisions are made on issues of pharmaceutical care and triage (i.e., prioritization of care, patient follow-up and therapeutic outcome monitoring).

Although the number of pharmaceutical products on the market is increasing, access to essential medicines is still lacking in many parts of the world. Rising health care costs and changing social, technological, economic and political environments have made health care reforms necessary throughout the world. New approaches are needed at individual and at population levels to provide safe and effective

pharmacotherapy to patients in an ever more complex environment [12, 47, 81].

In parallel with the development of pharmaceutical infrastructure and job creation is a growing reputation of the pharmaceutical specialties. Pharmaceutical care is a one important component link of the health care system. Pharmacist specialties are pharmacist technologist, the first table pharmacist and clinical pharmacist. Most of the pharmaceutical specialties are clinical pharmacist. As for the clinical pharmacist, we believe that both the United States and many European countries, that clinical pharmacist profession will become a successful profession in Georgia too [33, 39, 45].

Over the years, after the successful introduction of clinical pharmacy concepts and services in the United States and Europe, the rest of the world has followed suit in transforming pharmaceutical services. Along with adopting these concepts and philosophy, these countries also need to change the existing pharmacy curriculum to provide the necessary training so that future pharmacy practitioners are equipped with the necessary knowledge and clinical skills. The impact of these changes was strong enough that even countries lacking in appropriate health infrastructure and education facilities were eager to produce future pharmacists trained in these concepts. This is evidenced by the variety of undergraduate pharmacy degrees such as doctor of pharmacy (Pharm D) and master of pharmacy (M Pharm) being offered to in developing countries. [39, 47, 82].

The programs in developing countries vary significantly from similar programs offered in countries such as the United States, Canada, and the United Kingdom. The main reasons for the differences in developing countries are differences in need, professional standards, and pharmacy practice. Both clinical pharmacy and pharmaceutical care are closely related concepts, although there are differences among the professional bodies that define them. For example, the United Kingdom Clinical Pharmacy Association describes clinical pharmacy as encompassing the knowledge, skills, and attitudes required by pharmacists to contribute to patient care [28, 65, 74].

Clinical pharmacists practice across all healthcare settings and use in-depth knowledge of drugs and medical conditions to manage drug therapy as part of a multidisciplinary team. Clinical pharmacists are responsible for drug treatment and patient outcomes. They are the primary source of scientifically reliable information on the safe, correct and economical use of medicines. Whereas pharmacists may be involved in the management of specific drugs or individual medical conditions the standard of care that ensures that each patient's drugs (prescription, over-the-counter, supplements, or herbal medicines) are individually assessed to determine if they are appropriate whether they are for the patient, effective for the disease, safe for use in concomitant diseases and concomitant therapy, and whether the patient can take them.

An individualized care plan defines goals, monitoring and expected outcomes. The patient is actively involved in developing the plan with other members of the care team. The impact of conventional medical management provided by clinical pharmacists on an outpatient basis is being studied to identify efficient processes and measure overall patient outcomes. Disease-specific drug management programs have shown a reduction in the incidence of some drug-related problems, including non-adherence, and have reduced some health care costs [25, 41, 85].

Clinical care team in the form of health professionals – physicians, advanced practice registered nurses, other registered nurses, medical assistants, clinical pharmacists and other health professionals - with the training and skills to provide coordinated care high quality, specific to the patient's clinical condition ... needs and circumstances. The clinical pharmacist also provides support for group practice. Although the composition of the teams may vary, the responsibility and authority for specific aspects of the treatment rests best with the person best suited to the task. The effectiveness of a team of clinical pharmacists depends on a culture of trust, shared goals, effective communication and mutual respect. The best interests of the patient should be the driving force behind teamwork [53, 61, 69].

The clinical pharmacist does not need to be in the same place as a member of the medical team and therefore the large group of health professionals certainly includes general practitioners in hospitals, clinics and stores. Although this is only an example, patients benefit from collective management through better BP control, and a large proportion of patients achieved controlled BP when the pharmacist was part of the clinic. the team. The composition of dynamic clinical teams is reflected in the multidisciplinary nature of large professional organizations such as the Society for Resuscitation, the Society for Hospital Medicine, the Nutrition Society, and the Society for Neurocritical Physicians. Most of these organizations include clinical pharmacists in leadership positions, including the chair [49-54]. Clinical pharmacists are pharmacists, physicians who specialize in direct patient care. Although they are expected to follow the steps outlined in the pharmacist's POC, Standards of Practice (SOP) help clinical pharmacists comprehensively assess drug needs and often manage complex and specialized regimens. Documentation requirements are more detailed and, where applicable, should be consistent with billing requirements. The clinical pharmacist can exercise his practice more independently in certain contexts, in particular according to organizational privileges. Clinical pharmacists who have received the appropriate qualifications and certifications should now enjoy hospital privileges such as doctors and providers of excellence. They are required to maintain a valid license, but have additional certification requirements. SOP for the clinical

pharmacist also includes educational, research and quality improvement activities [55, 68, 84].

Pharmaceutical education varies across the world. In the United States (USA), a pharmacist is eligible for a license after 6 years of training in pharmacy. While not required, many of these graduates already have a Bachelor of Science degree in another field. Pharmacists interested in direct patient care may receive additional training in postgraduate residency programs in Emergency or Outpatient Care. It is a large-scale accredited expertise in clinical care, drug information, administration, teaching methods projects/research. Those interested in specialization can complete their second year of postgraduate study in areas as diverse as any medical specialty (outpatient care, intensive care, infectious diseases, internal medicine, oncology, and many others). Additional research grants may follow, especially for those interested in an academic or research role. Pharmacists licensed in the United States have received formal training, and many universities are partnering with pharmaceutical schools outside of North America to create clinical pharmacy training opportunities for international students. Additional clinical practice sessions were included in the training programs. Clinical pharmacists may practice under a formal collaborative practice agreement with physicians in their area of practice or under hospital conditions. For example, a pharmacist can change the dose, frequency, or way of taking medications that are covered by a collaborative practice agreement. They may also initiate serum concentration monitoring or other applicable laboratory tests to monitor the effects of therapy. Quality assessments have demonstrated the value of these programs. Hospitals may require people to provide periodic quality assessments or evidence of minimum activity. Pharmacists' laws are governed by the ordinances of state and local hospitals [56, 57, 84].

Clinical pharmacist role includes developing quality assessment tools and data evaluation. Clinical pharmacists make important contributions to these drug therapy control and surveillance systems. I also report the side effects of medications. Many side effects or incidents are related to systemic problems, and the clinical pharmacist regularly provides advice on possible process improvements when programming intravenous pumps, drug safety systems, or other processes [24-25]. The clinical pharmacist manages for critical care pharmacist residency program and oversees the resident's progress and interactions with other mentors in our healthcare system. The clinical pharmacist participates in multidisciplinary book club discussions, thematic conferences, and quality assessment meetings. Like other professionals, the clinical pharmacist strives to maintain its role in scientific publishing in the literature, maintain skills, and keep abreast of the growing literature. As a certified critical care pharmacist,

a clinical pharmacist must undergo continuing education and maintain certification, and as a licensed pharmacist, a clinical pharmacist must also pursue continuing education. As clinical pharmacy programs around the world are at different stages of development, the need for specialists who specialize in drugs and their optimal use is universal. Clinical pharmacists have supported these training programs and provided training to individuals and groups. Their publications are used by pharmacists around the world to prepare and maintain the certification board. This awareness is expected to continue as more partners are involved and more pharmacists and their multidisciplinary teams recognize the power of clinical pharmacists to improve patient care [35, 39, 68].

Hospital pharmacists are drug experts who work in multidisciplinary medical teams to manage drug use in hospitals. Hospital clinical pharmacists are integrated into services and departments and provide clinical pharmacy services to patients at the bedside, with each clinical pharmacist (or team) being responsible for patient care in a specific medical ward or department. Hospital pharmacists provide clinical pharmacy services to patients hospitalized at the bedside as well as in other clinical areas such as emergency departments and outpatient clinics, as well as physicians and nurses. Most of them work in hospitals, however, innovations in the practice of hospital pharmacy have led pharmacists to work in community health services, nursing homes, rehabilitation centers and medical clinics. Pharmacists roles may vary depending on the organization and clinical needs of the hospital pharmacy. Most hospital pharmacists provide clinical services in their area of specialization; however, they can apply their skills to other roles including pharmacy managers, purchasing managers, hospital pharmacy consultants. Educational roles are also prevalent, such as giving lectures to pre-registered trainees, making presentations to other medical staff, or providing educational support to pharmacy students [12, 28, 42].

The name clinical pharmacy describes the work of pharmacists whose main job is to communicate with other healthcare professionals, to meet, interview, interview and assess patients, to follow up specific pharmacotherapeutic recommendations, to monitor and control a patient's response to pharmacotherapy, and to provide drug information. Clinical pharmacists, mainly working in clinics, hospitals, health insurance funds and emergency services. They provide patient-centered services rather than production-centered services.

The health systems of many other countries have developed similar claims of competence for pharmacists. As a critical care pharmacy specialist, it is difficult to describe a typical day, but usually busy with the elements of a pharmacist's support process during the day. It is believed that the clinical pharmacist will be responsible

for all aspects of the administration of the drug. Every day, the clinical pharmacist assesses and evaluates new patients and updates the progress of previous patients, identifies drug-related issues and potential problems, develops a problem list and treatment plan for optimal dosage based on the renal and hepatic function, potential drug interactions and serum concentration. The clinical pharmacist joins the multidisciplinary rounds with the intensive care team and applies the treatment plan by teaching the medical residents the correct order of entry or by entering the orders themselves according to a collaborative practice agreement and by them. documenting in an electronic health record. A major contribution to medication management is identifying therapies that are no longer needed, reducing the cost and risk of adverse events, and supporting antimicrobial stewardship programs with infectious disease physicians and pharmacists. The clinical pharmacist also supervises the performance of quality measures such as the appropriate prevention of venous thromboembolism, the appropriate use of drugs to prevent stress gastritis, the addition of aspirin to increase the levels of troponin associated with I coronary ischemia, and discussing the need for central tubing and urinary catheters. The clinical pharmacist educates the team on drug-related topics and related literature through tours and didactic discussions. A clinical pharmacist is always available for emergencies and resuscitation, and to answer questions related to medication [17, 29, 63].

This includes managing drug therapy, dose adjustments, interventions to optimize drug therapy, and providing information about drugs to healthcare professionals and patients. Hospital. 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 [45, 46, 52].

A clinical pharmacist is in no way a competitor of a doctor, on the contrary, he must refer patients who need qualified medical care to a doctor. It is difficult to imagine that a pharmacist does not know the alphabet of medicine and does not have relevant knowledge of the main clinical syndromes. Must have a particularly good knowledge of the nomenclature of medicines (mainly over-the-counter medicines). In essence, a clinical pharmacist must provide a defined pharmaceutical supply and make a decision about the dispensing of the drug [47, 59, 81].

While curricula have been adjusted to prepare pharmacists for this new role, changes in practice have focused on other issues, such as: B. the emerging Covid epidemic which has brought about significant changes in the medical care industry in

terms of practice and law. Clinical pharmacy should be viewed as a different professional approach than hospital pharmacy. It is important for pharmacists to have a complete picture of a patient's condition so they can assess drug therapy and communicate effectively with other members of the healthcare team. Pharmacists need to establish a good relationship and connection with the multidisciplinary medical team by asking them to move from the pharmacy to the wards where they dispense medication and see doctors.

Staffing issues and a lack of trained clinical pharmacists have resulted in pharmacists being unable to work in clinical settings. In particular, the following pharmaceutical support functions were missing [49, 55, 84].

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 drug therapy in these patients, systematic and complex drug therapy is required [52, 59, 68].

For the majority of respondent patients', mostly significant factors, while choosing a pharmacy are: Service culture, wide range of products, reasonable prices. For less than half of respondent patients, mostly significant factors, while choosing a pharmacy are: Possibility to receive consultation about drugs with a physician or a pharmacist, convenient location of the pharmacy, high qualification of pharmacist personnel.

The majority of the patients determined the main factor while drug choosing process to be recommendation of a physician. Less than half part of respondents determined the main factor while choosing the drugs to be the doctor's prescription and advice of a pharmacist. Therefore, the role of pharmacist is significant in the healthcare system. For the higher quality healthcare and pharmaceutical services, the pharmacist's appropriate education level is of crucial importance. It was shown that the health of patients was directly related to the professional education level of pharmacist. Therefore, pharmacist should have eligible higher pharmaceutical education.

For the majority of respondents mostly significant factors while choosing a pharmacy were: service culture, wide range of products and reasonable prices. For less than half part of respondents mostly significant factors while choosing a pharmacy were: possibility to receive consultation about medications with a physician/ a pharmacist, convenient location of the pharmacy, high qualification of pharmacist personnel. Therefore, the role of pharmacist is underlined in healthcare system. For the higher

quality healthcare and pharmaceutical services education level is of great matter. The study provided showed that the health of patients was directly related to the professional education level of pharmacist. Therefore, pharmacist should have appropriate higher pharmaceutical education, higher professional knowledge in pharmacology, pharmaceutical care, pharmacotherapy, clinical pharmacy and other professional subjects.

For the majority of respondents mostly asked the pharmacists about the rules of drugs intake and prices of drugs. For the less than half part of the respondents mostly asked about the drugs' adverse effects and quality. For about the one third of them mostly asked about help in selection of analogue of drugs, indication/contraindication of drugs, the terms and conditions of their storage (conditions and shelf-life), the drugs dosage, rules of drug administration and selection of OTC drugs [55, 68, 84].

The society of European Union defines clinical pharmacy as a health care specialty that declares the activities and services of the Hospital/clinical pharmacist in proceeding, developing and promoting the rational, dedicate and appropriate use of medicinal products and medical devices [40, 48, 52].

However, the American College of Clinical Pharmacy, in an abridged definition, describes clinical pharmacy as that area of pharmacy concerned with the science and practice of rational medication use. The practice of clinical pharmacy embraces the philosophy of pharmaceutical care; it blends a caring orientation with specialized therapeutic knowledge, experience, and judgment for the purpose of ensuring optimal patient outcomes [41, 46, 85].

Pharmaceutical care is the responsible provision of pharmacotherapy for the goal of reaching certain effect that enhance a patient's quality of the life. That results are: treatment of a disease; elimination or decrease of the patient's symptomatology; exciting or slowing of a disease process; or preventing a disease or symptomatology. Pharmaceutical care includes the process through which a pharmacist cooperates with a patient and other medical professional in planning, monitoring, controlling and implementing a therapeutic scheme that will generate concrete therapeutic results for to the patients. This set involves three major functions: identifying potential and actual drug associated issues; resolving actual drug associated problems; and preventing drug associated issues. Pharmaceutical care is a needful element of health care system and should be integrated with other basic elements. It is provided for the straight benefit of the patient, and therefore the pharmacist is responsible entirely to the patient for the quality of pharmaceutical care [16, 42, 84].

The main relationship in pharmaceutical care is a jointly useful interchange in which the patient grants authority to the provider, and the provider gives competence,

ability, capacity, power, capability, and commitment (accept responsibility) to the patient. The vital goals, processes, and relationships of pharmaceutical care exist regardless of practice setting [43, 77, 95].

Health care costs increase twice annually, the volume of medication takes up a significant segment. Effective medication management and Patient care issues become actual. As a result, functioning of clinical pharmacist as a specialist in public health care system is required of human health protection in the private or public insurance companies' active participation will raise the demand for clinical pharmacist as a specialist in the area. Insurance companies work should be focused on the relationship between the clinic and pharmacy institutions with highly qualified specialists [12, 29, 57].

Whatever definition the basic essence of clinical pharmacy is the provision of pharmaceutical care to the patient, which is a different and more evolved form of hospital pharmacy services. Clinical pharmacist's duty to improve, enhance and simplify the appointment aspects of the drug, to reduce the likelihood of medical errors and unwarranted use of expensive drugs [14, 65, 88].

It is important to research pharmacoeconomically issues in clinical pharmacy. Pharmacoeconomics identifies, measures and compares the costs and consequences of pharmacotherapy to healthcare systems and public. The perspective of a pharmacoeconomic evaluation is paramount because the study results will be highly dependent on the perspective selected. The economical, humanistic and clinical results should be considered and valued using the methods of pharmacoeconomic, to inform making local decision whenever possible [44, 49, 81].

In today's healthcare settings pharmacoeconomic methods can be applied for affective formulary management, individual patient treatment, medication policy determination and resource allocation. Challenged to provide high-quality patient care in the least expensive way, clinicians have developed strategies aimed at containing costs [19, 27, 54].

The quality of the patient care system should not be exposed and compromised while trying to reduce expenses. The products and services delivered by of healthcare professionals should show pharmaco-economic value. That is a balance sheet of economical, material, humanistic, social and hospital/clinical results. Pharmacoeconomics be able to supply the systemic average means for that quantification.

The phrase "clinical pharmacy" was strike to define the job of pharmacists whose primary work is to act with the health care team, conversation and evaluate patients, doing specific therapeutic guidance and recommendations, monitor patient responses to pharmacotherapy and provide information about drugs. The clinical

pharmacists work primarily in clinics, hospitals are strong care settings and provide patient-oriented rather than product-oriented services. Clinical pharmacist should have knowledge of medicine, pharmacology, clinical pharmacology, pharmacy, to be able to cure the rational use of medicines, which includes the cost of the minimum economic conditions to achieve maximum therapeutic effect, and, ultimately, patient health and safety of care [45, 61, 69].

Pharmacy health care professionals, which is directly connected with the patient and their relatives. Involved in the drug issue and the appointment of treatment (medicines obtained without a prescription). It is comprehensive and necessary information to allow the use of medication, adverse events and efficacy. All the above will determine the role of the pharmacist in patient care and safety protection [79, 82, 89].

In some countries, the pharmacy profession specialist has been evolved to the points at which clinical pharmacy with patient-focused practice is no longer the exception but the rule for most pharmacists. Yet clinical pharmacy is still practiced exclusively in in-patient settings and hospitals, where access to patient data and the medical team is available. The medical record, also known as the patient chart or file, is a legal document including hospital-specific admission information, initial patient history and physical examination, daily progress notes made by health care professionals who interact with the patient, consultations, nursing notes, laboratory results, diagnostic procedures, dietary recommendations, and radiology and surgery reports. The most scheme also include sections for medication orders and clinical pharmacy progress notes on pharmacokinetic dosing and other relevant therapeutic comments and recommendations [15, 49, 64].

Clinical pharmacy demands an expert knowledge of therapeutics, a good understanding of disease processes and information knowledge of pharmaceutical products. In addition, clinical pharmacy requires strong communication skills, ability with solid knowledge of the medical terminology, drug monitoring skills, provision of medicines information, therapeutic planning skills and the ability to assess and interpret physical and laboratory findings [18, 27, 48].

Pharmacokinetic dosing, controlling and monitoring is a particular skill and service provided by clinical pharmacists. Clinical pharmacists are frequently active members of the medical team and accompany ward rounds to contribute to bedside therapeutic discussions [46, 67, 69, 98].

Globally, clinical pharmacy objectives is: to maximize the clinical effects of using drugs and choose an effective treatment for each patient individually; The monitoring of the course of treatment helps to reduce the risk of adverse events, to offer

the best therapeutic alternative, and to reduce the economic costs of treatment. In 1992 the (FIP) International Pharmaceutical Federation improved and developed the standards for pharmaceutical services according to the policy "Good pharmacy practice" in community, clinical and hospital pharmacy installation. Ensuing the recommendations of the WHO Expert Committee council and the support of the FIP Council in 1997, the FIP/WHO combination record about good pharmacy practice (GPP) were published in 1999.

The features of pharmacy working and practice will alter and vary among nations, it may also change among practice locations. Therefore, standards should recognize the uniqueness of different pharmacy practice facilities (e.g. community and hospital pharmacy). As well as the drugs needs change, the standards should recognize evolving practice settings and ensure these developing services with guidance without negatively affecting the evolutionary nature of practice. At the same time, a foundation should be set and established for practice below which the activity cannot be considered pharmacy practice at all and, therefore, should not be condoned.

When setting minimum standards on FIP and GPP underlines the significance of first defining the roles performed by pharmacists, as expected by patients, public and society. Secondly, relevant functions for which pharmacists have direct duty, responsibility, and accountability need to be determined within each role. Thirdly, the minimum of national standards must then be set and established, based upon the need to show competency in a set of activities supporting each function and role [48, 55, 61].

The minimum national standards for every action are based on processes where needs are relevant and defined appropriately according to the local needs of the pharmacy practice environment and national profession aspirations. All national pharmacy professional associations must also adapt and fit in these roles and functions in accordance to their own requirements specification. The activities listed below can be further determined and measured by setting indicators of good pharmacy practice within a national context and can be weighted by actual practice-setting priorities [36, 39, 75].

There are four basic roles where pharmacists' participation or supervision is expected by public and the individuals they serve: Prepare, obtain, store, secure, distribute, administer, dispense and dispose of medical products; Provide effective pharmacotherapy management; Maintain and improve professional performance; Contribute to improve effectiveness of the health-care system and public health. These roles may change for each individual pharmacist depending on their practice duty, liability and responsibilities. Specific standards of GPP can be developed only within a national pharmacy professional organization framework [12, 19, 46, 58, 61].

Disease-orienting pharmaceutical care :It is considered easier for pharmacists and their staff to provide disease – focused pharmaceutical care than comprehensive pharmaceutical care, but in European Union there is an ongoing dispute about whether it is ethically permissible to limit the provision of pharmaceutical care to groups of patients with certain characteristics and to not provide pharmaceutical care to others HIV/AIDS, Coronary Heart Disease, Hypertension, Lipid Management, Diabetes, Asthma etc [39, 59, 68].

Pharmacists are in the great position to meet the need for professionals to guarantee the safe and effective use of drugs. To do so, pharmacists must accept greater responsibility than they at the present time do for the management of pharmacotherapies for the patients they serve. This responsibility goes well beyond the traditional dispensing activities that have long been the support of pharmacy practice. While control and supervision of the routine drugs distribution process must remain the responsibility of pharmacists, their direct involvement in drug distribution will decrease, since these routine activities will be handled by qualified pharmaceutical care. However, the number of supervisory activities will increase. Thereby, pharmacists' responsibilities must be extended to include monitoring therapeutic progress, recommending and consulting with doctors, and collaborating with other health care practitioners on behalf of patients [18, 46, 37].

The move in the direction of pharmaceutical care is a critical factor in this cause. Pharmacists have the opportunity to enhance therapeutic results and patients' quality of life within existing resources, and must position themselves appropriately within the health care system. Pharmaceutical education has a corresponding responsibility to generate graduates who are competent to deliver pharmaceutical care. Outcome competencies contribute to quality guarantee by providing readily accessible standards against which practice may be measured [15, 19, 28, 58].

The certain and concrete standards of GPP can be developed only within a national pharmacy professional organization structure. Achieving certain and concrete standards of GPP for each nation within these recommendations may require considerable time and effort. As health professionals, pharmacists have a duty to begin the process without detention [17, 48, 69].

European pharmaceutical care network was established in 1995 (Pharmaceutical Care Network Europe) it cooperates with the World Health Organization on development and implementation of pharmaceutical care and appropriate pharmaceutical practice issues, where there is separated the direction of disease-oriented pharmaceutical care [17, 18, 36].

In 2013 the European pharmaceutical care network (Pharmaceutical Care

Network Europe) together with international experts has developed a new definition of pharmaceutical care, namely: pharmaceutical care, it is the pharmacist's role in patient care, which can be achieved through optimization of medicines to improve health status [14, 39, 67].

These circumstances of the pharmaceutical sector in the health care system in the patient-orientation, efficiency and cost-reaching way to better health. In fact, in space of the health system, in these conditions, such as universal health care, insurance, medicine and basic public health development, pharmaceutical care is a new challenge of pharmaceutical sector appears. He has to create a harmonious environment and wounded balance. To be able to administer the health condition of the population in terms of pharmacotherapy. It should be able to supply each individual with benefits of healthcare business industry, state and public healthcare, also be able to regulate its weak and negative aspects [19, 28, 41, 58].

Across its impact on individual patients' ministry of health, pharmaceutical care improves the quality and cost-effectiveness of health care systems. Enhancements at the micro-level encroach on the overall situation at the macro-level, i.e., communities' profit when individuals within them take pleasure in better health. Finally, the population at large will also benefit as system-wide enhancements occur. Pharmacists' services and involvement in patient-centered care have been associated with improved health and economic results, a reduction in medicine-related adverse events, improved quality of life, and diminished morbidity and mortality. A recent review investigated the effectiveness of professional pharmacist services in terms of consumer outcomes, and where possible, the economic profits. Its key findings illustrate the value of a range of services, including continuity-of-care after hospital discharge and education to consumers and to health practitioners. Overall, this review demonstrates that there is considerable high-quality evidence to support the value of professional pharmacy services in improving patient outcomes or medication use in the community setting [27, 28, 69].

The safety of patients is a priority for all professionals, such as pharmacists, who care about the health and general well-being of people like pharmacists. The safety of patients is determined as the prevention of harm to patients, including through errors of commission, lapse and omission [52, 53, 84].

For centuries, pharmacists have been guarantors /guardians against the poisons of those matter/ substances that can harm the society and community. Now more than ever, pharmacists are responsible and liable to guarantee that when the patient receives the drug, it will not cause harm.

As emphasized report pharmacy intervention in the use of drugs - The role of

pharmacists in improving patient safety, the participation of pharmacists in the safety of patients can be as early as possible during the prescribing phase and before the introduction of the medication. In many cases, pharmacists are supported by the programs and activities of their national associations listed in this extensive work carried out, a late-year pharmacy student at the university of Manitoba in Winnipeg, Canada, through an internship in FIP, a patient-centered and patient focused safety [54, 55, 69].

When focusing on drug errors, the FIP usually referred to the definition of the coordination Board for error alert and error alert about the treatment error. This is any preventable event that may cause or result in improper use of medicines or harm to the patient, while the medicine and drug is under the control of a professional pharmacists, patient or health care consumer also must be carefully in order to avoid, medical errors. Certain events may be related to professional practice, medical production, procedures, and systems, including prescription, production labeling, messaging, packaging and nomenclature, prescription, distribution, education, administration, monitoring and use [18, 45, 68, 74].

The definition of "harm" includes both temporary and permanent disruption of the body's function/structure, requiring intervention, and an error leading to death [47, 49, 63].

On model of care, physicians generally leader of the healthcare team, while the pharmacist enters the patient care continuum after the prescription has been written. Delivering the right drug, identifying the correct dosage and times it is to be taken, labeling it clearly, and listing potential side effects are all part of the pharmacist's well-known responsibilities and duties. But today's drugs are considerably more complex than they once were – and with genomes, genetic compounding and biotech. Pharmacotherapy stands to grow even more individualized over the next twenty years. The pharmacist's role is concurrently widening. Maximizing the safety of drugs is an increasingly critical responsibility in practice. Every new prescription requires that the pharmacist review it in conjunction with other information we have about the patient [67, 74, 82].

It is the pharmacist's goal to be sure the patient knows of the name of the drug, what it is for, when and how it should be taken, how to minimize possible interactions with other drugs (prescription or OTC) and foods, and optimal storage. Asking open-ended questions like "What has the physician told you about this drug?" helps. But even where the prescriber or nurse has explained, the patient may not have heard or perhaps didn't understand, making the pharmacist a critical checkpoint [67, 69, 82, 84].

Pharmacists acting a key role in assistance to patients maximize their pharmaceutical care. For example, it is supposed that up to fifty percent of all patients

on drug for hypertension do not have their pressure under control because they lack regular follow-up. Pharmacists are fine suited to track individuals on these drugs and help them obtain proper follow-up. Europeans are typically in their local pharmacy at least once or twice a month. Many come in weekly. It is apparent how convenient it is to have blood pressure machines set up, so patients can check their numbers and have the pharmacist interpret what those numbers mean. Since most insurance companies mandate refills every 20 days, this is a particularly useful service that provides a perfect opportunity to involve patients in their own care [67, 76, 86].

Patient safety is a priority for all professionals – pharmacists – who care about the health. Patient safety is defined as the prevention of harm to patients, including by drug or medical errors. For centuries, pharmacists were guardians / safeguards against "poisons" of substances that can cause harm to society. Now more than ever, pharmacist's responsibility is receiving safely the medication to the patient.

Pharmacists give professional services in the series of settings in response to national, local, native and international needs and priorities, with a focus on people and/or individual patients. Pharmaceutical public health includes services to publics, such as local guidelines and treatment protocols, medicine use review and evaluation, national medicine policies and essential medicines lists, pharmacovigilance, needs assessment and pharmaco-epidemiology [25, 39, 43, 56, 68].

The practice of pharmaceutical care and assistance is new, in contrast to what pharmacists have been doing for years. The key words are "responsible provision" and "definite outcomes". Whether pharmacists are reviewing a prescription or a patient medication record, talking to a patient or responding to symptoms, they are automatically assessing needs, prioritizing and creating a plan to meet those needs. What they often fail to do is to accept responsibility for this care. Consequently, they may not adequately document, monitor and review the care given. Accepting such responsibility is essential to the practice of pharmaceutical care [22, 28, 38, 46, 104].

The practice of pharmaceutical care makes obvious the pharmacist's responsibility and liability to the patient for the prevention of medicine-related illness. In the practice, the pharmacist estimates a patient's medicine-related needs, then determines whether one or more drug therapy problems exist, and, if so, works with the patient and other health care professionals to design, implement and monitor a care plan. This plan should be kept as simple as possible, and may refer to relevant sections of national or local evidence-based guidelines. The pharmaceutical care plan would help to resolve the actual pharmacotherapy problems and prevent potential drug therapy problems becoming a reality [23, 47, 58, 96].

In 1992 were used the term pharmaceutical services to represent all the services

that pharmacists require to resolve a patient's drug therapy problems. These services range from the provision of medicines information to patient counselling to medicines distribution. Pharmacists provide exhaustive, comprehensive, current and accurate information about drugs, based on best evidence are supporting the delivery of pharmaceutical care, although they themselves are not actually delivering it. Patient consultancy services should be incorporated into standard daily interaction with patients in the community pharmacy setting. Properly, timely and accurate drug dispensation and distribution is required to ensure the delivery of pharmaceutical care [20, 28, 46, 55].

Pharmaceutical care is a prospective patient-oriented practice with a concentrate on identifying, resolving and preventing of pharmacotherapy problems. This objective is obtained by a patient care process comprising four steps: assess the patients to drug therapy needs; develop a care scheme, project and plan to meet the needs; implement the care plan; and evaluate and review the care scheme. Pharmacists require a high level of education, knowledge and skills to deliver pharmaceutical care and an organizational structure to facilitate its delivery. This structure must provide for the referral of patients who cannot be managed at a particular level of care to a different level, where optimal pharmaceutical care can be provided. Eventually, as patients benefit from appropriate pharmacotherapy, this will also have a beneficial impact on their families and the society in which they live and work [11, 63, 68, 87, 90].

As the experts of drugs, pharmacists have always been known as an accessible and trusted source of advice and treatment. Today, their contribution to health care is developing in new ways to support patients in their use of medicines and as a part of clinical decision-making across the range of specialisms. Pharmacies are open every day, are convenient for most people to receive and there is no need for an appointment to see the pharmacist. All this makes pharmacies the natural first port of call for help with common diseases. Self-treatment of common ailments is becoming more popular as a growing range of safe, effective medicines becomes available from the pharmacy without the need for a doctor's prescription. Pharmacists have the competence to advise both on the choice of drugs and their safe and effective use. The right of the selection of self-treatment can prevent some conditions from developing or help others clear up faster [45, 87, 95].

A pharmacist is not a simple "drug dealer", but a health professional with specific scientific knowledge who provides services to the public to protect the health of patients and ensure the correct, effective and rational use of medicines. In addition to often very different national legislations (at least in the EU), pharmaceutical practice is regulated and regulated by its own organizations and disciplinary bodies (e.g. in

Europe the Royal Pharmaceutical Society of Great Britain (RPSGB), the Federal Pharmaceutical Association (ABDA), which regulates, regulates and strengthens the profession and training. It is important that the pharmacist can distinguish which patients have sufficient medical and scientific knowledge and which do not. This aspect is fundamental for the pharmacist's use of medical terminology, which must be expressed in the simplest, most accessible and most confidential way possible. To achieve a more effective counseling process, the patient must be recognized again as passive or active, and the message must be adapted according to their gender, age and social background. Additionally, the pharmacist is often required to treat patients from diverse ethnic, cultural, linguistic, and religious backgrounds, including potential nutrition-related illnesses (e.g., rickets and osteomalacia caused by malnutrition or malnutrition). Therefore, pharmacists must first understand the needs of each patient and tailor the message to the recipient. Attitudes of healthcare providers can sometimes be a barrier to effective patient-centered communication. The pharmacist must therefore maintain a high level of humility with regard to his scientific discoveries. The Accreditation Council for Pharmacy Education (ACPE) in the United States has developed guidelines that establish standards that new pharmacists must follow in order to assume and fulfill their patient communication responsibilities. The integration of Introductory Pharmacy Practice Experience (IPPE) and Advanced Pharmacy Practice Experience (APPE)-based learning into the curriculum demonstrates the added value of pharmacy education. Thanks to this project, students had the opportunity to deepen their knowledge in order to be able to optimally use the additional services offered today in pharmacies, in particular medication dispensing and consultation. APPEs also provided students with the opportunity to specifically develop academically acquired communication skills and build interpersonal relationships with patients. These programs are integrated into pharmacy school curricula in the United States and Australia, where social pharmacy training and acquisition of communication skills have become mandatory for professional qualifications, and the same is required in Canada.

Community pharmacists are among the most accessible healthcare providers. Screening conducted by a local pharmacist can facilitate early diagnosis of diseases/risk factors, thereby optimizing health outcomes. However, it is important to assess the acceptability of screening services to ensure they are accepted by key stakeholders. The purpose of this review was to examine the acceptability of pharmacist-led screening by all stakeholders (i.e., patients, pharmacists, and other healthcare providers) and to identify the methods used to assess the acceptability of the screening. Community pharmacists are among the most accessible and trusted

healthcare providers and are playing an increasingly important role in the delivery of professional services. With an average of 18-20 visits per year, patients are ten times more likely to visit a pharmacy than a GP. Patients can often turn to community pharmacies for prescription and over-the-counter medications. Therefore, pharmacists regularly communicate with patients to facilitate the provision of pharmacy screening services. Primary care facilities, including general practices and community pharmacies, are often the first point of contact in the healthcare system. Because of their accessibility, community pharmacies can be an appropriate place for pharmacists to screen for diseases and risk factors, enabling early diagnosis and intervention. Patients are willing to participate in pharmacist-led screening for various risk factors/diseases and report that such services are possible. The pharmacist examination can take a long time. Therefore, it is important that these services generate income through commissions [16, 43, 84].

Pharmacists specialists more than one fifth made profession (occupational) choice by influence of parents' advices, pharmacists specialists less than one-fifth made profession (occupational) choice by the desire (ambition) to obtain a profession in compliance of own trends, aspirations, and inclinations (affections), pharmacists specialists' more than one third made profession (occupational) choice by the consider of personal desire, pharmacists specialists less than one-fifth made profession (occupational) choice according specialty love from childhood. Insignificant number of pharmacists specialists made profession (occupational) choice by teachers' advices or considering advices of an expert-specialist of professional orientation (of career guidance), pharmacists specialists' little bit less than half made profession (occupational) choice according desire to obtain high-quality professional education (training) , pharmacists specialists' more than quarter made profession (occupational) choice according the prestige of the profession (specialty), pharmacists specialists' little bit less than half made profession (occupational) choice according guarantee to be employed, pharmacists specialists' little bit less than half made profession (occupational) choice according the desire to care for the health of people [45, 48, 59, 67].

More than half of higher pharmaceutical education pharmacists were satisfied with professional (occupational) choice, a quarter of higher pharmaceutical education pharmacists were partially satisfied with professional (occupational) choice. While pharmacy faculty students' vast majority were satisfied with professional (occupational) choice.

Less than a third of higher pharmaceutical education pharmacists were satisfied with professional career, about one third of higher pharmaceutical education pharmacists were partially satisfied with professional career, little over than one third

of higher pharmaceutical education pharmacists were not satisfied with professional career [74, 78, 85, 86].

About one third of higher pharmaceutical education pharmacists were satisfied with work (job), little over than one third of higher pharmaceutical education pharmacists were partially satisfied with work (job), quarter of higher pharmaceutical education pharmacists were not satisfied with work (job).

A little less than a fifth of higher pharmaceutical education pharmacists have realized professional capabilities, skills and habits to the full extent. A little bit less than half of higher pharmaceutical education pharmacists have realized professional capabilities, skills and habits partially, more than 50% of own potential, about a quarter of higher pharmaceutical education pharmacists have realized professional capabilities, skills and habits – partially, less than 50% of own potential, One tenth of higher pharmaceutical education pharmacists can not say.

The vast majority of higher pharmaceutical education pharmacists consider, that for full pharmaceutical activity, it is necessary condition- to exist continuous professional education; therefore, higher pharmaceutical education pharmacists consider, that professional education should not be ceased [41, 49, 64, 98, 109].

About half of higher pharmaceutical education pharmacists used knowledge in the practice, which obtained from professional publications, from professional literature from internet. More than one third of higher pharmaceutical education pharmacists partially used knowledge in the practice, which obtained from professional publications, from professional literature from internet. Competent pharmacist specialist who is capable of providing qualified pharmaceutical care (assistance) is formed in the professional training process.

The vast majority of higher pharmaceutical education pharmacists consider, that the most essential (relevant) issues for pharmaceutical activity are: new drugs (medications), about drugs generic, chemical and brand names, issues of pharmacotherapy of certain diseases, the safety, effectiveness and quality of the drugs (medications), pharmacology, pharmacodynamics and pharmacokinetics issues, pharmaceutical care.

The Convincing majority of higher pharmaceutical education pharmacists consider that the government should make the certification of pharmacists, which is very essential for professional perfection, for self-realization, for career advancement, for continuous professional education, for Professional growth. The vast majority of patients consider the government should make the certification of pharmacists. The vast majority of manager pharmacists consider that the government should make the certification of pharmacists. The vast majority of health care specialists consider that

the government should make the certification of pharmacists. Employed pharmacy faculty students' vast majority consider that the government should make the certification of pharmacists.

Less than one third of higher pharmaceutical education pharmacists were satisfied with the balance between the workload and personal life, more than one third of higher pharmaceutical education pharmacists were partially satisfied with the balance between the workload and personal life, about one third of higher pharmaceutical education pharmacists were not satisfied with the balance between the workload and personal life. Less than a quarter of higher pharmaceutical education pharmacists were satisfied with the time duration of job, about one third of higher pharmaceutical education pharmacists were partially satisfied with the time duration of job, more than a third of higher pharmaceutical education pharmacists were not satisfied with the time duration of job.

The vast majority of higher pharmaceutical education pharmacists were not satisfied with income, a quarter of higher pharmaceutical education pharmacists were partially satisfied with income, less than one tenth of higher pharmaceutical education pharmacists were satisfied with income.

Patients a little more than a third choosing the drugs (medications) by the advice of a pharmacist, more than half of patients consider, that for pharmacists are essential required professional competency. Patients' vast majority ask to pharmacists about rule of intake of drugs (medications).

The vast majority of health-care specialists consider that for pharmacists are in need of additional-further regular study in direction of new medications, in issues of pharmacotherapy of certain diseases, in pharmacology and pharmacotherapy, in drugs (medications) toxicity. More than half of health-care specialists consider, that pharmacists provide information about drugs (medications) to the population.

The vast majority of health-care specialists consider that, pharmacists doing optimization of quality of life for people, related to health by providing of pharmaceutical care (assistance, aid).

Less than half of health-care specialists consider that the levels of basic training of pharmacists are not corresponding to the contemporary requirements. The vast majority of health-care specialists consider that, it is necessary to provide cooperation between pharmacists and physicians on the issues of pharmacotherapy. The vast majority of health-care specialists consider that, a pharmacist should provide assistance in teach patients to understand rules of intake of prescribed drugs (medications).

Near the half of pharmacy faculty students, the most attractive areas (spheres) of activities are- pharmacy- drugstore. The vast majority of pharmacy faculty students

consider that education should not be ceased. Pharmacy faculty students' more than a third was working by specialty.

The vast majority of young pharmacist specialists would not like to leave profession. The vast majority of young pharmacist specialists consider that in pharmacology, in pharmacotherapy, in pharmaceutical care, in clinical pharmacy their knowledge is lack or is not enough for successful work.

On the basis of theoretical and logical analysis, the structure and composition of the factors has been developed, which taking into account the objective (external), subjective (internal) and universal factors, which effects on the professional formation of the pharmacist. Developed the unity of criteria for pharmacist professional formation, criteria for common professional formation (Characteristic for all stages) and criteria for specific professional formation (characterized for separate stage).

The study of professional adaptation of pharmacists showed that inadequate professional knowledge, incompatibility performance of the acquired profession, the harder adaptation to the staff is the main reasons for incomplete (imperfect) pharmaceutical care (assistance). The vast majority heads of pharmaceutical organizations and young specialists consider the coexistence of a tutor (experienced professional pharmacists) as the main factor of professional improvement for pharmacists.

To raise professional standards, government should make the certification of higher pharmaceutical education pharmacists, which is very essential for pharmacist's professional perfection, for higher pharmaceutical education pharmacist self-realization, for higher pharmaceutical education pharmacist's career advancement, for to exist pharmaceutical continuous professional education, for pharmacist professional growth, for pharmacist job satisfaction, for pharmacist career satisfaction. for pharmacists much higher status between health care specialists, for pharmacists Economic (material) welfare , for pharmacist career advancement (growth), for allows to realize fully the received knowledge in work by the full extent, for to have private pharmaceutical activity, for pharmacists career development (growth), for Correspondence of pharmacist qualification to work, for perspective for professional promotion, for possibility to career enhancement, for to realize by the full extent pharmacist professional capabilities, skills and habits, for career (growth) development, for pharmacists professional satisfaction, for pharmacist job satisfaction, for perspective for career promotion(enhancement, for satisfaction of income(salary).

Government and pharmaceutical companies should create promotional conditions for male, for to make pharmacist profession attractive for man. It is very important for career advancement (growth), for satisfaction of balance between the

workload and man personal life. For satisfaction of income (salary), for pharmacists' professional satisfaction, for pharmacist job satisfaction, for perspective for career promotion (enhancement), for satisfaction of income (salary).

The Government and private pharmaceutical companies should take care for professionalism, authority and power of pharmacist position such: to increase the salaries of pharmacists, should increase the system of benefits (incentives) scheme for employees' pharmacists. Pharmacists working conditions should be improved, in drug-store labor conditions should become more advisable for pharmacist, and pharmacist's regime (schedule) of work should become more flexible. It should be existing more pleasant psychological climate within the collective in the colleague's team in drugstore, the possibility of career growth (development) should be available to all pharmacists, pharmacist job duration time per week should be reduced, labor contract should be more effective and advisable for pharmacist [36, 48, 56, 61, 65, 82].

Because professional activity of pharmacist is very important for the society, the higher education institutions must also develop the pharmaceuticals educational programs and need to increase the hours in pharmacology, pharmacotherapy, and pharmaceutical care and in clinical pharmacy. Higher education institutions should increase the credits in pharmacology, pharmacotherapy, and pharmaceutical care and in clinical pharmacy.

Support greater role of pharmacists to own medicines management for patients and collaborate with physicians for revision. It is necessary to provide deep cooperation between pharmacists and physicians on the issues of pharmacotherapy and health care.

The state should take care of the profession of pharmacist authority. By the support of state, should increase the authority and social importance of the pharmacist profession in health care system. Pharmacist profession should become more power and authority, pharmacist should have much higher status in health care system, and this is achieved then, when the pharmacist profession will move into the health regulated professions list.

Support for preparation and implementation of continuous education courses aimed raising the professional qualifications of pharmacist staff. Pharmaceutical education should become continuous. Which will increase pharmacist's professional qualification, professionalism, professional knowledge and professional competency. The level of basic training of pharmacists should become correspond to the contemporary requirements, state should develop continuous pharmaceutical education programs that should be available for all pharmacists. Should exist qualification upgrading (improvement) study courses, professional education or professional training courses, which will be available for all pharmacists. Pharmacist's education

process should not be stopped. The possibility of professional education or training should be available for all pharmacists. Should advance pharmacy education and develop and expand continuing education. Developing a continuous pharmaceutical education system, will enhance the professionalism of pharmaceutical personnel. Pharmacist should be responsible for registration of side (adverse) effects of the drug (medication) [48, 54, 59, 66, 72, 114].

Support to the translation of professional pharmacist literature and their inclusion in educational programs. International professional publications in pharmacy should be more available and required for all pharmacists.

Preparation and implementation of the registration-certification regulations for pharmacist staff. Encourage research into all fields of pharmaceutical practice. Raising awareness on the essence of pharmacists' profession and pharmacist' functions among medical personnel and general public.

**Conclusion.** The pharmacy profession is not formally recognized as a regulated medical specialty within the Georgian healthcare system. Consequently, it is imperative to reform the advanced pharmaceutical education framework, reorienting it towards a greater emphasis on pharmacotherapy, pharmaceutical care, and clinical pharmacy. This evolution is a prerequisite for establishing pharmacists as a pivotal component of the future healthcare landscape. State health policy must formally define the role and establish universal principles for the profession, granting it regulated status comparable to that of a family physician. Furthermore, Georgia must develop and enforce updated registration, licensing, and accreditation standards for pharmacists that are aligned with international benchmarks. This alignment should facilitate the mutual recognition of qualifications, enabling Georgian pharmacists to practice throughout Europe and ensuring Georgian certifications are acknowledged in Western nations. A key step in this process is for the state to champion the profession's standing; through governmental support, the authority and societal value of pharmacists must be elevated. Achieving a more influential and higher-status position within healthcare is contingent upon the profession's official inclusion in the national registry of regulated health occupations.

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