# MINISTRY OF HEALTH OF UKRAINE NATIONAL UNIVERSITY OF PHARMACY

# faculty for foreign citizens' education department of social pharmacy

## **QUALIFICATION WORK**

# on the topic: «RESEARCH ON THE ORGANIZATION FOR PHARMACEUTICAL WORKERS REMUNERATION AT PHARMACEUTICAL ENTERPRISES ON THE EXAMPLE OF PHARMACIES IN MOROCCO»

**Prepared by**: higher education graduate of group Фм19(4,10д)-01 specialty 226 Pharmacy, industrial pharmacy educational program Pharmacy

Nour Alimane Ait ASSILA

**Supervisor**: associate professor of higher education institution of department of social pharmacy, PhD, associate professor Lyubov TERESHCHENKO

**Reviewer**: professor of higher education institution of department organization and economics of pharmacy, DSc, professor Hanna PANFILOVA

Kharkiv - 2024 year

#### **ANNOTATION**

The qualification work describes the important role of the pharmacist in the provision of services in community pharmacies. In our study, we investigated pay payment methods and pharmaceutical policies related to pharmacist profitability in several selected countries. Pharmacist remuneration systems in some countries of the world are analyzed. A more detailed study is noted for the Kingdom of Morocco.

The qualification work consists of the introduction, three chapters, conclusions and the list of the studied literature.

The total amount of makes 52 pages of the text, including 11 tables and 9 figures. The bibliography contains 55 names of the studie.

*Key words*: pharmacy reimbursement, pharmaceutical policy, pharmacist, remuneration, medicines pricing, medicine margin.

## **АНОТАЦІЯ**

У кваліфікаційній роботі описано важливу роль фармацевта в наданні послуг в громадських аптеках. У дослідженні ми аналізували методи оплати праці та фармацевтичну політику, пов'язану з прибутковістю фармацевтів у кількох вибраних країнах. Проаналізовано системи оплати праці. Більш детальне дослідження відзначено для Королівства Марокко.

Кваліфікаційна робота складається з вступу, трьох розділів, висновків та літератури. Загальний обсяг складає 52 сторінок, у тому числі 11 таблиць та 9 фігур. Бібліографія містить 55 найменувань.

*Ключові слова:* націнка, фармацевт, оплата праці, ціноутворення на ліки, лікарська політика.

# **CONTENTS**

ABBREVIATIONS
INTRODUCTION5
CHAPTER 1. THEORETICAL AND METHODOLOGICAL BASIS OF THE
FORMATION OF THE CONCEPT OF REMUNERATION7
1.1. Determination of the legal category of remuneration
1.2. Analysis of factors of the external and internal environment on the
organization of labor remuneration11
Conclusions to the I Chapter17
CHAPTER 2. INVESTIGATION OF FOREIGN EXPERIENCE OF USING THE
EMPLOYEE REMUNERATION SYSTEM
2.1. Peculiarities of state regulation of the labor market
2.2. Foreign experience of using the labor system and employee
motivation
Conclusions to the II Chapter29
CHAPTER 3. ANALYSIS OF ORGANIZATION OF REMUNERATION OF
PHARMACY WORKERS ON THE NATIONAL LEVEL30
3.1. Study of the peculiarities of the labor payment system pharmaceutical
workers30
3.2. Analysis of the organization of current pharmacy services provided in
European countries
3.3. Organization of remuneration of employees in Morocco44
Conclusions to Chapter III50
GENERAL CONCLUSION51
REFERENCES53

#### **ABBREVIATIONS**

ANAM - National Health Insurance Agency

AMO - Assurance Maladie Obligatoir

AED - United Arab Emirates Dirham

API - Active Pharmaceutical Ingredient

EMA - European Medicines Agency

EU - European Union

EC - European Commission

GDP - Gross Domestic Product

GCC - Gulf Cooperation Council

HIC - High-income countries

ICESCR - International Covenant on Economic, Social and Cultural Rights

LMIC - Low- and middle-income countries

MPET - Manufacturer's Price Excluding Tax

MP - Medical Products

NHS - National Health System

NDP - National Drug Policy

PLCS - Pharmacist-led cognitive services

PC - Pharmaceutical Care

PSP - Public selling price

OECD - Organisation for Economic Cooperation and Development

RAMED - Régime d'Assistance Médicale

VAT - Value-Added Tax

WHO - World Health Organization

#### INTRODUCTION

Relevance of a subject. Retail and hospital pharmacies work throughout the world to provide patients with access to medicines and help them use them responsibly. According to the International Pharmaceutical Federation (FIP) concept, pharmacies are healthcare institutions that provide pharmaceutical services. These include both traditional drug dispensing and the provision of additional services.

In our study, we aimed to review the remuneration patterns of pharmacists and the factors influencing pharmacy profitability in selected countries, including Morocco. Since the payment of pharmacy labor exists only in a small number of countries, the purpose of our work is to study the most common models of reimbursement for the cost of pharmacy services, as well as to provide a comprehensive overview of the global system of reimbursement for the services of outpatient pharmacies.

Recently, however, there has been an increase in published literature describing the work of pharmacists in providing clinical services in the setting community, including targeted services in chronic patient care, transitional care, treatment management, and vaccination services. Different jurisdictions are developing strategies to engage pharmacists in the provision of clinical services in a community setting. Some countries have evaluation of clinical services provided by pharmacists that add value to health care are sustainable, and at least inexpensive compared to routine care, however, despite this progress, in many countries pharmacists have not been recognized as healthcare providers or are not allowed to bill themselves for a pharmacy clinical service. Paying pharmacists to provide clinical services is a timely policy issue with a focus on determining who should pay pharmacists to provide clinical services, how to pay them, and understanding whether and how financial incentives affect pharmacists' behaviors. For example, pharmacists may be motivated to provide more services or different types of services depending on the remuneration model used (service fee, capitation, salary, pay-perperformance, mixed pay). In addition, countries that implement pay reforms in their health systems are less willing to use fee-for-service and are exploring other package payment mechanisms to pay pharmacists for clinical services. Pharmacists are members of healthcare teams that provide valuable services to society. Their incentives to provide such services are influenced by the methods of remuneration.

To achieve the put purpose the following tasks of the research were definite:

- to analysis of factors of the external and internal environment on the organization of labor remuneration;
- to investigation of foreign experience of using the labor system and employee motivation;
- to study of the peculiarities of the labor payment system pharmaceutical workers.

The subject of the study was the theoretical and methodological basis of methods of payment of work of pharmacists, organization of current pharmacy service.

The objects of the study were statistical indicators of socio-economic development of EU countries and Morocco; WHO data; legislative and regulatory acts regulating the labor remuneration system.

**Methods of researches.** The research material was data from FIP and World Health Organization (WHO) reports, analyzed using analytical, comparative and generalization methods.

The practical significance of the work is used in the development of a model for the formation of labor remuneration system, (using the example of Morocco).

**Scientific novelty.** The model of the labor payment system is analyzed, the latest pharmaceutical services and their impact on the profitability of pharmacies are summarized.

**Structure and volume.** The qualification work consists of the introduction, three heads, conclusions and the list of the studied literature.

# CHAPTER 1. THEORETICAL AND METHODOLOGICAL BASIS OF THE FORMATION OF THE CONCEPT OF REMUNERATION

#### 1.1. Determination of the legal category of remuneration

Labour is one of the vital factors because it makes a significant contribution to the development of every organization. In fact, without it, no organization can achieve its goals. Therefore, work exists only to ensure the achievement of organizational goals. By providing labor for the production of goods and services, a person receives a wage as a reward, that is, labor is necessary for production, without which production is incomplete. Wages (remuneration) as a reward to labour is a great incentive to workers to increase productivity remunerations are therefore wages paid to stimulate labour and productivity. Work itself is the exertion of mental and physical human effort on production activities with a view to ensuring organizational goal and objective.

Definition of "remuneration" has theoretical and practical importance, since this legal category is one of the main characteristics labor relations. Together with the term "reward" in scientific literature and practical activities the concept of "salary" is application [3].

From the side of legal assessment, the concept of "remuneration" is considered broader than the definition of "wages", which is only part of the remuneration in the process of its organization. Remuneration as a socio-economic category is reflected in the characteristics of its functions, including: goals, roles, components of practical activities to coordinate and realize the interests of the main subjects in the process of business relations.

Remuneration as compensation to employees for the cost of their labor is not a constant, which is part of the employer's personnel costs. Consequently, the organization of remuneration of workers can be presented in the form of a certain set of measures, which should be based on fundamental rules. The basis for the effective organization of remuneration is an objective assessment of individual factors that influence both the employee's work activity and it work demeanor [43].

Employers' path to reward proceeds towards on how work participants are perceived in relation to their participation in the enterprise process, as part of the business or as a human resource.

Improving remuneration processes affects production efficiency and improves the quality of the product and services provided. Its essence is to change the current production and social relations between the employer and the employees of the enterprise. Ensuring satisfaction from work leads to loyalty and organization of the processes in which they participate, as well as involve both individual structural units and the organization as a whole in economic activities.

Remuneration plays an important part in human resources because it influences many aspects. We have identified the main areas that affect human resources in the remuneration process (tabl.1.1) [44].

Table 1.1 Human resources influencing aspects of remuneration

Aspects	Main directions	
connection:	Salary plays a vital role for employees and it is their main source	
employee	of income. Company must be able to guarantee conditions that are	
and	attractive enough to attract and retain talent.	
employer	Companies spend a lot of money hiring new employees	
	(considering their base salary and tax), so payroll is one of the	
	largest expenses in an organisation's budget.	
talent	Employee well-being is directly related to their productivity and	
attraction	motivation. Well-paid professionals perform better. Investments	
and retention	in salaries directly affect activity outcome.	
	Dedication to work and commitment to the company is directly	
	related to employee remuneration. Competitive salaries and	
	prospects for advancement within the organization make it	
	possible to stay at one company for a long time and not consider	
	offers from other companies.	
liability and	A competitive pay and benefits strategy portrays the company as	
effect	an attractive place to work and is a strong lever for attracting new	
accomplish	employees and strengthens the employer brand.	

Companies use three main reward systems. A compensation plan can usually be a combination of all three, depending on the company's needs and goals (fig.1.1) [44].

# Fixed base salary

Minimum amount a company offers a professional

# Variable pay

The amount of variable pay an employee receives depends on the perfomance and objectives reached

# Fiexible benefits

Employee doesn't receive money. Cannot be the only form of remuneration

Fig. 1.1 Types of employee compensation.

Employers' expenses for using workers' labor consists of many factors:

- payment for work performed and payment for non-working time;
- one-time payments and incentives;
- stipulated collective agreements and social agreements;
- professional training and development staff;
- provision of social and living conditions;
- ensuring safe and normal conditions for labor process management and labor protection;
- payment of taxes and fees is provided in accordance with current legislation (social and pension insurance, etc.).

In the context of the existence of a market economy and various forms of ownership, the concept of minimum wage (MW) plays a rather important role. At the legislative level, the formation of this concept began in 1896, in Australia [50].

It was then that special councils were created, which consisted of entrepreneurs, workers of various specialties and the public. They had to set a fair minimum wage for each industry. At the beginning of the 20th century, laws on this issue were adopted in England, France, the Netherlands, Norway, Germany, and

Spain. There is no single definition of the minimum wage, there are different interpretations. The most common is that the MW is the minimum wage per unit of time (hour, day, month or week) that the employer can pay, and the employee, in turn, can legally sell his or her labor.

A study of the various sources of international law shows that there is agreement between States on the issue of minimum wages. We have identified the main international conventions that describe the main requirements for it (tabl.1.2) [25,30].

Table 1.2

Main international conventions

International standards	Content
1928, the International	required signatory nations to establish a minimum
Labour Organisation	wage fixing body that should "take account of the
(ILO) adopted Convention	necessity of enabling the workers to maintain a
	suitable standard of living."
1970, the ILO adopted	delineated the factors that must be included in the
Convention 131	calculation of a minimum wage: "the need of
	workers and their families, their general level of
	wages in the country, the cost of living, social
	security benefits, relative living standards of other
	social groups, requirements of economic
	development, the country's level of productivity and
	maintenance of high levels of employment."
ILO Convention 30, Hours	recommends that signatory nations establish an
of Work Convention,	overtime rate of no less than one-and-quarter times
Article 7.4	the regular rate.

The labor legislation of the UN, the European Social Charter, the EU Charter of Basic Social Rights of Employees contain general basic provisions regarding the rights of employees to fair and satisfactory remuneration, which ensures a decent existence for a person and his family, and prohibits discrimination when setting and changing wages. In many European countries, a national minimum wage is established, the size of which is determined in different ways, but the basis is the

provisions of the ILO Convention № 131 "On the Establishment of the Minimum Wage with Special Consideration for Developing Countries" [13].

The labor legislation of the UN, the European Social Charter, the EU Charter of Basic Social Rights of Employees contain general basic provisions regarding the rights of employees to fair and satisfactory remuneration, which ensures a decent existence for a person and his family, and prohibits discrimination when setting and changing wages.

Along with this, conciliatory procedures based on the principle of social dialogue and social partnership are widely used in foreign practice [15].

The right to fair and reasonable remuneration is also enshrined in Article 23.3 of the Universal Declaration of Human Rights (1948). Nearly all countries have a national body which determines minimum wages nationally, or for sectors and/or occupations [25].

Wages and other benefits may also be directly negotiated through collective bargaining agreements between employers and workers represented by independent trade unions. In most jurisdictions, overtime attracts a premium above the ordinary rate of pay. As this varies between sectors and countries, overtime pay should be calculated in accordance with the rates specified in national legislation or any applicable collective bargaining agreements.

# 1.2. Analysis of factors of the external and internal environment on the organization of labor remuneration

Compensation is a set of benefits and rewards that an employee receives for services in the workplace in an organization. It is calculated in periods of a week, month or year, through the organization's independent system for calculating payment. The basis for the calculation is the periodic pay slip that the employee receives at the end of the working period. The amount of remuneration directly depends on the complexity and conditions of the work performed, the professional and business qualities of the employee, the results of work and the economic activity of the enterprise.

Forms and systems of labor remuneration, labor standards, rates, tariff grids, salary schemes, conditions of introduction and amounts of allowances, surcharges, bonuses, rewards and other incentive, compensation and guarantee payments are established by the enterprise in the collective agreement in compliance with the norms and guarantees provided for by law.

We highlighted the main components of rewards and presented examples in the table 1.3 [25,30].

Table 1.3
Basic salary structures

Key	Definition	Examples
components		•
Compensation	A monetary reward that a management staff get for the time worked and for the services provided	Wages are paid in accordance with the amount of time worked at the enterprise.  Salary is a certain number of payments received by an employee for work performed at the end of the reporting period.  Assistance and additional payments are quite significant structural elements of the organization of financial incentives for employees of enterprises that are related with quantitative labor indicators  Additional time given at the end of work, paid at the end of the main time
Benefits	Applications for employees who are members of the work carriage in the collective	The pension scheme - a supplement is provided to citizens who have reached the age specified by law.  The main reasons defined by the state for employees with a full salary are annual leave, for recovery, increased education, pregnancy and child care.  The concept of health insurance - the employer support insurance for people.

# Continuation of table 1.3

Pawards		Professional player qualified statement - chief executive promotes memberships, certifications and training opportunities for employee advancement and career growth. A comprehensive form of work - the employee is given the opportunity to choose a place of work, at the enterprise and at home online.  A fee is a financial reward in each for
Rewards	Grant, providing benefits, of rewarding employees for elevation performance in the company's workplace.	A fee is a financial reward in cash for compliance with production standards and increasing established labor productivity.  Commission is a motivating factor that earned percentage calculated from turnover as an additional reward.  Tips is rewarding employees for great customer service reflecting through monetary form.  Increasing wages is the other side of the benefit for participants in the production process who have achieved labor productivity standards.  Profit sharing is a company compensation plan that allows employees to share in a portion of the business's income.  Career and professional changes for employees who shows effective performance may receive the reward of promotion and remove the high seat management.  The sponsor gives days off to employees as a reward for good work; this can be expressed in a paid trip to a vacation spot.  Filling and developing jobs are reflected in the acquisition of other responsibilities and the need to make independent decisions for effective employees; assignment to team or project leaders.  Opportunities for creativity and innovation is competent employees are empowered to generate and implement new ideas that improve the quality of the organization's products and services.

A competitive entrepreneur is lured by a full-fledged reward package that can motivate and satisfy the demands of participants and lead to the creation of a flexible and stable workforce for the implementation of business strategy.

The sources and forms of remuneration may depend on various factors. It should be noted that depending on the importance of the employee for the company, there are different types of additional payments.

Taking into consideration things like the individual's employment status (full or part time) and whether they are in an executive-level position or are an entry-level member of a company makes a significant difference in calculating the final amount. Also, remuneration can vary depending on how an individual is typically paid, meaning, whether they are a salaried worker if they get paid based on commission, and if they regularly receive tips as a part of the work they do. Important to note that a lot of companies may try to attract or hire desirable employees from another company by offering them better remuneration, meaning, higher pay, more benefits, and better perks.

The difference between the minimum and maximum wages and its level determines the principles for building the management structure of employee pay at different enterprises. This helps support equity, probity and openness in the wage decision-making sequence that is consistent with effective decision-making skills and economical market conditions. To establish a balance between internal and external factors, it is necessary to designate the classes and salary range of the enterprise's employees [44].

The literature identifies internal factors that influence the level of remuneration and these include the values that entrepreneurs highlight, the mission of the organization, its culture and strategy. Politics and philosophy, job analysis and performance evaluation, internal values are among these factors. The philosophical category of compensation highlights the directions and goals that guide a company when making covering decisions. Internal justice ensures that employees are treated fairly and consistent pay based on their results and performance ratings. A brief description is highlighted in diagram 1.2.

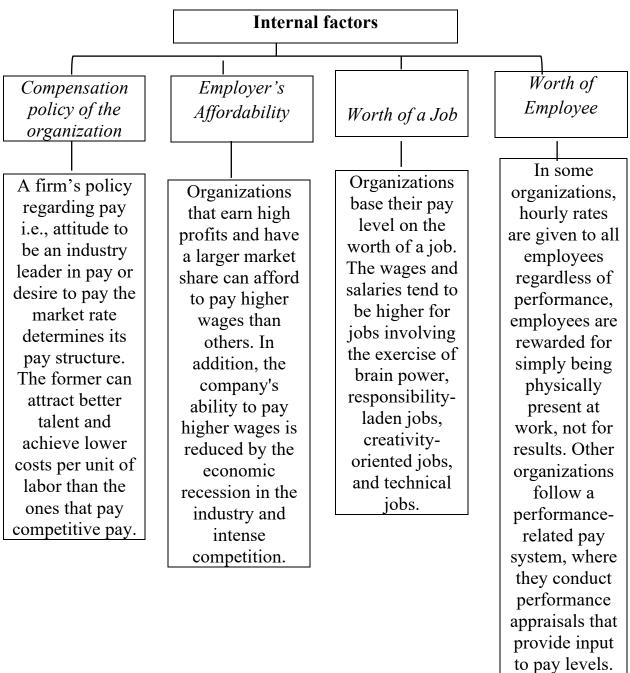


Fig. 1.2 Internal factors.

Elements describing the labor market, industry, economy and legislation refer to external factors. This includes positioning and market analysis and external capital. Market analysis is the collection and comparison of data on the wages and competitiveness of colleagues in a particular economic market.

Market positioning reflects the competitiveness of a company's salaries and attractiveness to potential and current employees. External fairness ensures that salary levels and ranges are consistent with market conditions and expectations, as well as legal requirements and regulations, such as minimum wage laws, equal pay

laws, or tax laws. Market status shows the competitiveness of the enterprise's wages and its attractiveness for potential and current employees. Environmental factors influence salary levels and ranges in accordance with market expectations, including minimum wage laws and regulations, equal pay laws, or tax laws.

We have highlighted the main directions of the external and internal environment and their descriptions in a table 1.4) [30,35,44].

Table 1.4 External factors

Factors	Description
Labour Market Condition	Mainly reward depend on supply and demand. Sometimes skilled employees' compensation has to be high. And, if is supply is high also organization can't reduce the rewards, because there are some rules and regulations relating to the minimum wages.
Economic Conditions	The organization must maintain itself in a competitive environment. Based on time, economic conditions may change. However, an organization cannot change its reward system based on its individual idea.
Prevailing Wage Level	Most organizations set their pay according to the level of similar jobs in the industry. They conduct salary research and, accordingly, strive to maintain the level of wages in various jobs. If a particular firm maintains a higher wage level than others in the industry, the cost of its workers becomes higher, which can increase the final cost of production.
Cost of Living	An increase in the cost of living, an increase in the cost of goods and services. It varies from region to region within a country and from country to country.
Labor legislation and regulations	State or local employment laws and regulations play a critical role in shaping pay policy. These laws may set minimum wage requirements, overtime rules, and anti-discrimination guidelines that employers must follow.
Union's Influence	The collective strength of the trade unions also influences the wage levels, enjoy an upper hand in certain industries like banking, insurance, transport and other public utilities.
Globalization	The arrival of multinationals and large corporations has caused significant changes in the remuneration structure of companies in various sectors. Wages are booming in sectors such as, pharmaceuticals, biotechnology, electronics, financial services, and more.

## **Conclusions to the I Chapter**

Remuneration is a multifaceted concept that plays a crucial role in the world of employment and compensation. It encompasses all the ways in which individuals are rewarded for their work or services within a company or organization. Beyond just basic salary or wages, remuneration includes a wide range of financial and nonfinancial benefits, each designed to recognize and motivate employees.

Remuneration paid to employees is an essential element of employment contracts. Remuneration must correspond, in particular, to the type of work performed and the qualifications required for the performance of job duties, as well as the quantity and quality of work. In no case can the remuneration paid to employees be lower than that specified in the regulations on minimum remuneration.

Ensuring remuneration is crucial when it comes to attracting and retaining employees, motivating them to perform their best and fostering a positive work environment. It contributes to job satisfaction, reduces turnover rates and enhances productivity, benefiting both employees and employers.

Wage workers are subject to wage policies and a wage determination process that are often the result of social dialogue or internal enterprise policies. Through such policies, e.g. effective implementation of minimum wages, design and implementation of collective pay agreements, or even the designation of non-regular bonus profits at enterprise level, wages can be changed to effectively act upon wage inequality.

# CHAPTER 2. INVESTIGATION OF FOREIGN EXPERIENCE OF USING THE EMPLOYEE REMUNERATION SYSTEM

## 2.1. Peculiarities of state regulation of the labor market

International Labor Standards around the world place emphasis primarily on the development of a person's personality. The international community recognized in the Declaration of Philadelphia of 1944 that goods are not made by labor. Work occupies a fundamental and important part of human life and is important for the well-being and development of a person as an individual. The economy of every country necessarily includes the expansion and creation of new jobs and the development of good working conditions for people. International labor standards must guarantee and develop the right direction to improve the lives and dignity of men and women [12].

Regulation of the labor market is one of the highest priority areas of state policy for the further social development of each state. The process of formation of the labor market reveals problems in the field of employment in the context of the global crisis: the working population is declining, negative phenomena associated with unemployment, falling real wages, and social tension are growing. Thus, studying foreign experience in regulating the labor market, as well as the wage structure, is important for all countries.

For the unemployment challenges successful solution, its negative economic and the social consequences overcoming, it is quite necessary the state's and the government's specific measures to be combated with unemployment, and they, moreover, should be confirmed and supported by the appropriate fiscal and credit policy, having stimulated and enabled the quite new working places and jobs creation at the enterprises of the various forms of the ownership, through the full and partial costs compensation of the hiring and working force training, the subsidized loans allocation for the working places and jobs creation, as it is in the developed countries. So, for example, in the USA, the domestic and home corporations are received the tax credit of 4,5 thousand dollars a year during the biennium period of time for each recruited for the employment program. In Germany, the state and the

government subsidy are being introduced for the further engaging in the gainful employment. So, the various types of the organizational and financial support to the unemployed involvement into the labor market activity are covered, with this special grant. The size and the duration of this provision grants accepted the unemployed for his employment, in principle, is determined by the results volume of his work and the requirements for the relevant workplace. Thus, the amount of the subsidy can be made up 50 % of his labor earnings, and it can be provided for the term up to 12 months [28,29,43].

Also, the payments are made to be engaged the self – employed persons in the labor career. Already, the existing, on this score, guidance is complemented by the opportunity to be got the state financial assistance by these persons for the counseling and the mediation, from the side of the competent third parties.

Unlike Germany, the labor market regulation is carried out with the minimum participation of the state and the trade unions in Great Britain. The hired employees have the right to be addressed to seek the protection of their interests in the court or in the tribunal, concerning the labor disputes in the case, if the employer is violated the terms of the employment contract, in respect of the wages, the labor conditions, or the working hours' modes, and etc. So, all the disputes are considered in the framework of the precedent - related case law, where the judges and the jurors assessors thoroughly are investigated the disagreements' causes and the circumstances between the employee and the employer, and they are made decisions. Thus, this special system has been evolved over the entire history of Great Britain, and it is still being used. Then, the social security system is practically provided the wide opportunities for the income support level maintenance during the unemployment period, in this country [43,44].

The state regulation of the labor market in the foreign countries is aimed at the active labor market policies implementation, as it is evidenced by the «mutual obligations» of the unemployed strategy development and the state, having suggested, that the efficient public services for the unemployed returning to the employment are combined with the measures further development to be stimulated the unemployed to be sought the work, that is expanded the labor supply in the labor market. So, the changes, having introduced into the payment of benefits and the social assistance implementation mechanism, are allowed to be activated the unemployed their own employment, as the employment and the subsequent inclusion into the production process are became economically more advantageous, in comparison with the benefits and payments receiving.

## 2.2. Foreign experience of using the labor system and employee motivation

A fair reward system is necessary to attract, retain and motivate employees while ensuring fairness and alignment with the organization's goals. Table 2.1 highlights main characteristics a good reward system [25,30].

Table 2.1 Key features of a good remuneration system

Key features	Description		
Equitable and	transparency and fairness criteria allow employees to accept		
Fair	remuneration relative to their peers in similar positions as being		
	commensurate with their factors such as proficiency, experience		
Competitive	criterion - competitiveness in the relevant area of the industry,		
	to attract and retain highly qualified workers		
Performance-	rewards interconnected with personal and organizational		
Linked	performance to motivate employees to pursue excellence and		
	contribute to company development		
Clear Structure	the system has a clear and transparent pay structure with clearly		
	defined levels or ranges for all workers in the industry		
Differentiation	model provides differences in pay levels including factors:		
	skills, experience, performance and responsibilities		
Flexibility	system requirement: flexibility accommodate to change in the		
	economic environment, employee assignments and market		
	dynamics		
Transparency	having employees understand how their remuneration is		
	calculated, including the criteria used to evaluate performance		
Incentives and	the reward formula includes incentives and additions that are		
Bonuses	based on performance and encourage participants to take on		
	additional responsibilities		
Legal	the main requirement for the system is compliance with labor		
Compliance	laws and regulations that meet the minimum wage, overtime and		
	other compensation		

There are many definitions and concepts as well that currently are used to explain payments related to employees that are working in different types of companies. The official statistics regarding payments at the European level refers to the wages of the employees in various sectors of activity and contain financial earnings stipulated in the employment contracts that regularly came to the employees (e. g., monthly, bimonthly).

In present, European Union it is quite varied across the Member States in pay setting and practicing. National legislation, the main activities that are producing added value to the national economy, or the simple presence of qualified human resources- are examples of factors that definitely influence the level of wage/compensation from a country. In fact, there are a lot of elements that influence pay trends from European Union area.

The promoted wage policies at the national level influence the employment packages offered by public and private companies in that country. The obligations of the Euro Plus Pact and the European Commission of 2011 regulate the obligations and recommendations that protect the supranational interests of the European Union, on improving remuneration systems, to implement the requirements of the member states [15].

In developed countries, the participation of entrepreneurs in the processes of investing in employee training is, as a rule, significant, and the share of employees involved in professional development is quite high as a result of the active interaction of social partners and the formation of collective social responsibility.

At the very beginning of the economic reforms, the countries of the European Union opened a broad road to social dialogue. Salary issues are resolved through collective bargaining or individually, at the enterprise level [2, 43]. In enterprises of the EU countries, individual remuneration has become widespread, which should be used both in the regular assessment of personnel achievements and with the help of a special structure of the tariff system.

Establishing effective wage levels, optimizing wage costs, and at the same time developing and applying an effective motivational mechanism at the enterprise is an important and difficult task. It is possible to solve a number of the above-mentioned problems with the help of a critical and balanced study and adaptation of modern European experience. The results of the study of the main regulators of the salary of employees, which influence the establishment of its fair differentiation in European countries, show that each country has certain traditions in this matter and there is no uniform approach to its solution [9, 29]. In the table 2.2 summarizes the differences and features of wage regulation in European countries.

Table 2.2. Wage regulators affecting its differentiation in European countries

	T=
Countries	Regulators of wage differentiation
Germany	Sectoral tariff agreements, which are treated as civil agreements, apply only to the members of the organizations that concluded them.
Great Britain	The National Wage Calculation Calculator works electronically to check the payment of wages at a level not lower than the minimum wage.
France	National minimum wage and industry agreements. The agreements establish unified tariff systems for economic sectors with a fairly wide range of payment within each category.
Netherlands	The level of the minimum wage depends on age and the length of the working week and is changed by the Government twice a year. Issues of remuneration at the contractual level are regulated by collective agreements
Italy	Sectoral tariff agreements, which are considered as civil agreements. The terms of the agreement may also be extended to employees who are not members of any of the trade unions that negotiated these agreements. If the individual contract does not comply with the law, then the salary is established in a court of law, taking into account the conditions of payment of labor accepted by the collective agreements. There are unified industry systems, according to which workers, managers, specialists and employees are paid according to a unified tariff grid; at the same time, some of the ratings are intended only for workers, some are for specialists and employees, and some of the ratings are shared

## Continuation of table 2.2

Austria	Industry tariff agreements. They fix the minimum wages of		
	workers and employees, which are mandatory for all enterprises in		
	the industry.		
Finland	A central agreement on income policy, which is binding on all employers and employees, regardless of trade union membership, in all sectors and fields of activity. The agreement establishes tariff		
	grids by specialty, regulates payment of overtime hours,		
	percentages of deductions to social funds, etc., and fixes the		
	minimum level of hourly wages.		
Poland	The Tripartite Economic and Social Committee is responsible for negotiating the minimum wage for the coming year. If the members		
	of the committee do not reach an agreement, the Ministry of Labor		
	independently sets the amount of the minimum wage.		
Czech	Minimum wage, guaranteed wage and collective agreements and		
Republic	contracts. Collective agreements at the sectoral level are called		
	"Higher level collective agreements". They apply to employers and		
	employees whose representatives did not participate in their		
	conclusion.		

Wages represent compensation for the labor contribution of employees to the activity of the enterprise, and one of its main functions is precisely stimulating. The performance of this function must be ensured through the relationship with a specific result (work performed), the usefulness of this employee for the company, his value, competitive advantages and at the same time "compensate" for excessive physical stress, insufficient prestige of the work, it's not entirely comfortable conditions from the point of view of the employee himself [2,27].

Work motivation is one of the topics that receives great attention in world practice. When forming work motivation systems at enterprises, the experience already accumulated by world practice should be used. Of the variety of models of work motivation systems in the market economy of most industrialized countries, the most characteristic Japanese, American, French, English, German, and Swedish models can be singled out [5].

Differences in the systems of payment and motivation of the personnel of American and European enterprises are summarized in the tabl. 2.3 [5,29,44].

Table 2.3 Models of payment policy and labor motivation at enterprises in foreign countries

Countries	The essence of the model of payment and work motivation
USA	Various modifications of the hourly wage system with standardized problems, supplemented by various forms of bonuses. Combination of elements of piecework and hourly systems. The dependence of the increase in wages is not so much on production, but on the growth of qualifications and the number of professions.
France	A wide variety of economic instruments, including strategic planning and stimulation of competition, flexible taxation system. Indexation of wages depending on the cost of living and individualization of wages. The method of labor evaluation, has a multifactorial nature and the criteria used, which has a strong stimulating effect on the efficiency and quality of work, serves as a factor of self-regulation of the size of the wage fund, ensures broad awareness of employees.
Great Britain	Two modifications of the system of remuneration depending on the profit: cash and equity, which involves partial payment in the form of shares. The possibility of using a fluctuating wage system is provided, which depends entirely on the company's profit.
Sweden	The model of labor motivation is distinguished by a strong social policy aimed at reducing property inequality by redistributing national income in favor of the less well-off population. Swedish trade unions do not allow the owners of low-profit enterprises to reduce wages below the general level established in the negotiations for the renegotiation of collective labor agreements.
Germany	The model of work motivation is based on the fact that at its center is a person with his interests as a free individual who is aware of his responsibility to society. Germany's market economy is called social because the state creates conditions for all citizens, stops injustice and protects all the deprived and defenseless. Social justice and solidarity are indispensable prerequisites for social consensus. This model provides both economic well-being and social guarantees in equal measure.
Japan	It is characterized by outpacing the growth of labor productivity in relation to the growth of the population's standard of living, including the level of wages. The existence of such a model is possible only with the high development of national self-awareness in all members of society, the priority of the interests of the nation over the interests of a specific person.

Modern trends in the formation of foreign labor motivation systems are summarized in the tabl.2.4 [5,29,43].

Table 2.4 Modern trends in the formation of labor motivation systems

Countries	Motivation factors of labor	Distinctive features of work
т	system	motivation
Japan	Professional skill	Lifetime employment
	Age	One-time retirement benefit
	Experience	
	Work efficiency	
USA	Encouraging	Combination of elements of
	Activity of company	piecework and hourly systems
	Quality of labor	Profit sharing
	High qualification	Technological allowances
		Premiums for accident-free work,
		long-term use of equipment
		Adherence to technological
		discipline
		Double rate system
France	Qualification	Individualization of remuneration
	Quality of work	Point-based assessment of workers'
	Number of rationalizing	work for professional skill, labor
	proposals	productivity, work quality,
	Level of mobilization	compliance with safety rules
		Initiative
		Additional benefits (raising
		children, providing a car, providing
		for old age)
Great Britain	Revenue	Copartner ship
Great Distant	1 to venue	Business participation in capital
		Labor business participation
Germany	Quality	Stimulation of work
Germany	Quality	
		Social guarantees
Sweden	Solidarity wage	Differentiation of tax and benefit
		systems
		Strong social policy

Labor evaluation makes it possible to solve not only the tasks of the remuneration policy, but also the personnel policy of the enterprise as a whole

through procedures for assessing the personnel potential, the level of competence of employees, optimizing the costs of personnel development, strengthening motivational factors and strengthening labor discipline, managing the quality of work, organizing feedback connection between employees and management. Labor evaluation, in turn, is closely related to the evaluation of the company's personnel [18].

Each system of remuneration has its own features, advantages and disadvantages, and therefore, the choice of a certain model of remuneration policy, or their combination, cannot be carried out separately from other areas of work with personnel.

Since the beginning of the 1990s, foreign countries have observed certain stable trends in the field of remuneration of employees, in particular, an increase in the scale of variable wage systems and the share of group forms of remuneration, as well as increasing their share in the total income of employees; widespread distribution of payment systems for knowledge and competence; development of flexible systems of benefits for employees of enterprises. In general, these trends increase the stimulating role of remuneration in achieving high final results of the activities of employees of enterprises. At the same time, labor productivity turns out to be the most important justification for labor payment systems [13]. In most Western European companies, premium funds are formed for the creation, development and release of new products, their specific weight in the total volume of production, etc. [43].

The EU considers wage policy as a part of macroeconomic policy aimed at maintaining price stability, effective employment, and ensuring human development.

The main standards that the European Union regulates relate to employment and working conditions and they are set out in the Community Charter on Fundamental Social Rights of Workers in 1989. The Charter does not contain a definition of remuneration and decisions on the main directions in this area are left to the discretion of each member state [12-18,50].

We have identified the main approaches to the sphere of minimum remuneration of employees in some countries. The countries of the European Union vary greatly in their approaches to determining the minimum wage.

For example, Germany passed a wage law in 2014. Trade unions and businesses have played a significant role in establishing this issue.

As of January 2022, the minimum rate is €10.20 per hour, which corresponds to an untaxed wage of €1650 for those working in a basic 40-hour week.

In Spain, the government issued a Royal Decree numbered 231/2020 of 04.2020, where it determined a minimum rate of 950 euros per month.

In the last 10 years, from 2010 to 2020, the minimum monthly wage has risen to 600 euros. Before the introduction of this law, it was only 170 euros.

France is an economically developed country in Europe and the standard of living of people in it is quite high. For 2021, the national minimum wage is 1650 euros. Over the past year, it has grown by 1.5 percent.

France is ahead of other countries such as Germany in terms of the minimum hourly rate of 11 euros per hour, which is the same for the entire working population, and does not depend on age or work experience.

In Italy, the official minimum wage is not determined by law; generally, Italian entrepreneurs enter into an agreement with Italian workers, which stipulates its size. Based on the report, Statista, we can conclude that salary levels vary significantly depending on the region of the country. The highest incomes are received by workers living in the northern region of Lombardy - 40,000 euros per year. The southern region accounts for 20% of the country's low-paid employees.

There is no one-size-fits-all minimum wage in Great Britain, and it depends on employee age and whether they are an apprentice.

The United Kingdom differs from other countries when it comes to minimum wages. There is no single system in the country that corresponds to all segments of the population. The rate largely depends on the age of the worker and his work experience.

For 2021, the national minimum wage for a 25-year-old worker is £9. There is a tax system that includes benefits for certain types of activities.

The application of taxes depends on the place of work, as well as on the category of employees [29,30].

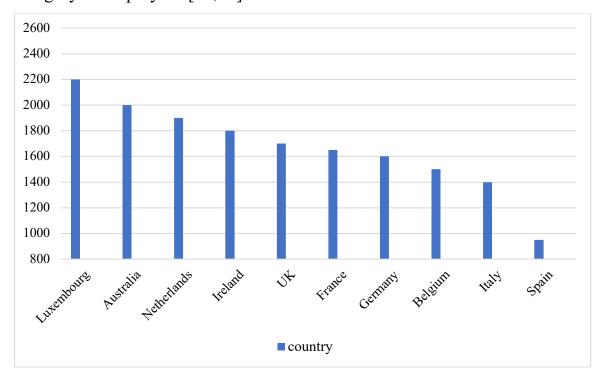


Fig.2.1 Monthly minimum wage (USD) on 2022 year.

The minimum wage is a socially protective instrument for all employees of an enterprise, as well as a guarantor for establishing a basic level of income in the relevant industry of the country. Based on statistical data from countries, we have built a graph (fig.2.1) that shows the difference in MW in European countries as of 2022 [29]. The vertical line shows the monthly amount converted into US currency received by the employee for a full day of work.

The standard of living in developed countries is much higher than in developing countries, which corresponds to their minimum wage. We have selected ten countries showing the highest level of minimum wage per month. The graph shows that Luxembourg workers have the highest wages in the European region in the amount of \$2,200. Spain shows the average for European countries which is 900 US dollars.

## **Conclusions to the II Chapter**

Taking into account the analyzed experience of developed countries regarding the regulation of the remuneration system and its individual components, the following can be used in developing countries.

Among the remuneration systems, a successful focus is on the experience of Germany and the United Kingdom, in which the remuneration system is built on stimulating productivity growth and the use of individual contracts. This implementation will motivate employees to produce more and better products, and in the concluded individual contracts – to prescribe all working conditions, which, in turn, will more effectively protect the rights of employees.

Widely apply the bonus system of remuneration, which makes it possible to differentiate the number of wages depending on the individual results of the work of each employee.

To introduce the use of the tariff system of wages at enterprises of all types of economic activity and forms of ownership, which should stimulate the improvement of employees' skills and individual labor results.

To use an intermediate model for the formation of the minimum wage, which will be determined in nationwide collective agreements, which are concluded annually and apply to all employees. The minimum wage should be higher than the living wage and significantly higher than unemployment benefits in order to motivate the unemployed to look for work.

# CHAPTER 3. ANALYSIS OF ORGANIZATION OF REMUNERATION OF PHARMACY WORKERS ON THE NATIONAL LEVEL

# 3.1. Study of the peculiarities of the labor payment system pharmaceutical workers

The health care sector is a major source of employment globally. The health care workforce accounts for approximately 3.4% of total global employment, including approximately 10% of overall employment in high-income countries (HIC) and a little over 1% in low- and middle-income countries (LMIC). One feature that characterizes employment in this sector across the world is that it is a highly feminized sector – women make up about 67% of global employment in the sector - with a significant degree of gender segregation [4,6,7,9-11].

Pharmacists working in community pharmacies form an important part of the global healthcare system. Pharmacy compensation models aim to ensure pharmacy sustainability and to ensure pharmacists can provide cost-effective services to patients. Several states have well-established reimbursement systems that determine and reimburse community pharmacy services, while others are in the process of expanding reimbursement.

Pharmacists are highly-trained medical professionals who possess a deep understanding of pharmaceutical drugs and how they interact with human biology. Whether they're providing patients with medication at a local pharmacy or working alongside physicians in an outpatient clinic, pharmacists are rewarded for their unique skill set, knowledge, and expertise.

Over the past 50 years, the pharmacy profession has been associated with the issuance and reimbursement of the cost of a product, leaving little room for pharmacists to develop their role and focus on innovative services that add value to the healthcare system. Over the past decades, the profession of pharmacist has undergone significant changes. The role of the pharmacist from a profession that was focused only on the deliver and assignment of drugs has changed over time and has become more focused on patient assistance [11]. Pharmacists, together with

other health care providers such as doctors and nurses, constitute the largest workforce worldwide. Moreover, community pharmacists are the most accessible healthcare professionals, and the way they deliver services can affect patients' health status [3,4,5].

From 2010 to 2022, the growth of pharmaceutical workers has become noticeable in some OECD countries. This is explained by the increasing demand of the population for pharmaceutical services. In the last decade, there have been 90 pharmacists per 100,000 population, an average of 21 percent. Japan has the highest number of pharmacists as of 2022 (199) and Colombia shows the lowest number of pharmacists per capita (19).

Professional pharmacy services include reviewing the prescription of medications, their use by the population, compliance, testing and monitoring of patients. Several services are consisting in the expanded list of tasks of the pharmacist and are called cognitive pharmacy services by the international organization [6]. Another term that can be used to define these services is cognitive pharmaceutical services. It is used to describe interventions that are aimed at implementing pharmacotherapy through effective interaction between the patient and the health care worker [7].

Pharmacist-led cognitive service: Service provided or supervised by the pharmacist, based on a standardized and structured procedure, for the purpose of promoting optimal health and drug therapy and that is not necessarily drug-product related [5].

Over the past two decades, community pharmacists have begun to create pharmacy services that are directed at a specific person of health care providing [15]. Individual care assume local pharmacists to assess and monitor medication use and patient condition to improve health-related outcomes [16, 17].

After analyzing official health reports from governments of different countries and based on information from pharmaceutical organizations, WHO identified services carried out under the guidance of a pharmacist, which can be classified as cognitive services, the main of which are listed in table 3.1. [26,37].

## Pharmacist-led cognitive services

# "Cognitive services"

partisanship support and monitoring; introduction of injectable drugs; assessment of inhalation technique; general replacement; health check; home delivery of medicines; immunization; INR self-testing devices; medicines dispensing; form of medical assistance for heroin and other opiate addicts; needle exchange; new medicines service; personalised medicine (precision drugs); medication therapy management; point-of-care testing; pharmacists prescribing (under specific protocol and/or for specific list of medicines); prescription renewal; repeat dispensing; provision of emergency oral contraception / post-coital contraception; provision of information on medicines; smoking cessation counseling; tourist medicine service.

Transparent and defined terms for pharmaceutical services are critical to ascertain their value. European healthcare systems differ from country to country, so it is important to note the standard definitions of services provided.

Worldwide, the number of cognitive services provided by pharmacists to clients is increasing every year, but reward systems differ from country to country. The service "medication review" was reported to be the most common remunerated service, nevertheless the structure, the eligibility criteria and the fee are varying a lot.

The promotion and funding of cognitive services in pharmacy is spreading throughout the world. The choice of reimbursement model for these services remains personal [37]. There are two models for remuneration for pharmacist services. One model, which is enforced by law, is called legislative, and the other, which is determined by a legal document, is the contractual or contractual remuneration model. Often pharmacies use a combination of the first and second models. Community pharmacies determine compensation taking into account the services provided by the health care system and the activities of the pharmacy.

Based on the optimal patient outcomes achieved through the provision of pharmaceutical products and services, a remuneration model is developed. The main

components of this model play an important role in the promotion of such services [5].

The main part of compensation for pharmacist services in many countries is the sale of medicines; some pharmacies take this into account when calculating the markup, the maximum reimbursement price. This service may include both the cost of selling the prescription itself and the fee for packaging the product; a visit to the pharmacy is also taken into account [20,47]. Another part of the payment for services concerns their volume, which may vary depending on the remuneration system.

Analyzing the latest FIP reports, one can note the difference in payment and number of services in countries around the world. In European countries, many services are paid, but consultation on asthma treatment is paid only in the Nordic countries. To the European countries you can also add Australia, Great Britain (UK) and New Zealand (NZ), where many pharmacy services are paid. In countries such as Indonesia, Hungary, Iraq, Pakistan, Slovakia, Israel and Morocco, pharmacists are not reimbursed for the provision of professional pharmacy services [20 - 22,28,41].

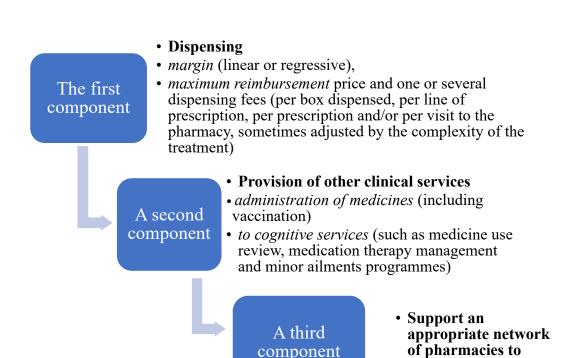
An additional component expect on the pharmacist's ability to promote rational use of medications in patients by providing cognitive pharmaceutical services that are partially or not rewarded. Unfortunately, most pharmacies do not take into account the full range of services and payment is limited only to the dispensing of drugs. To implement quality pharmaceutical care, an integrated approach is required, where professional pharmaceutical organizations, together with government agencies, can formulate and designate the development of strategies to stimulate payment for pharmacy services.

The community pharmacy remuneration model should take into account the types of activities and services expected by the health care system, their significance (for the payer and the health system) and the total cost of providing these services (and the need for additional investment). It should provide positive incentives to achieve optimal health outcomes through pharmaceutical products and services. In

most countries, the model relies on one (or more) components specifically designed to reward specific actions or outcomes (fig.3.1) [27,32,41-45].

**Specific activities (outcomes)** 

meet local needs



**Components** 

Fig.3.1 The remuneration model for community pharmacies.

The first component relates to the dispensing of medicines (which represents the sole or predominant share of the remuneration of community pharmacies in most countries). The most common formats are margin (linear or regressive), maximum reimbursement price and one or more dispensing fees (per box dispensed, per prescription line, per prescription and/or per pharmacy visit), sometimes adjusted depending on the complexity of the treatment.

The second component relates to the provision of other clinical services, ranging from prescribing medications (including vaccinations) to cognitive services (such as medication use review, drug therapy management, and mild disease programs).

A third component may support (or maintain) an appropriate network of pharmacies to meet local needs. These measures tend to target specific pharmacies whose financial sustainability is at risk under the standard scheme, but which are considered necessary to ensure equitable and good access to medicines and pharmaceutical expertise [32,41-43,46].

Compensation in community-based pharmacies is changing, reflecting the evolution of pharmacy practices and providing incentives to provide new necessary services (fig. 3.3).

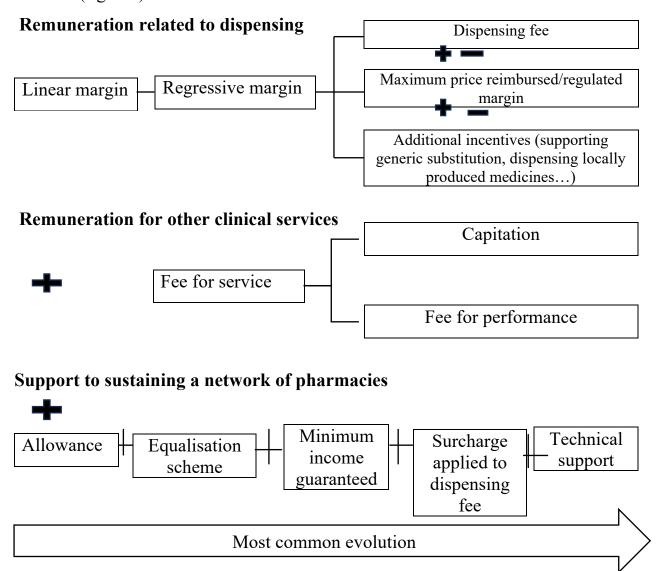
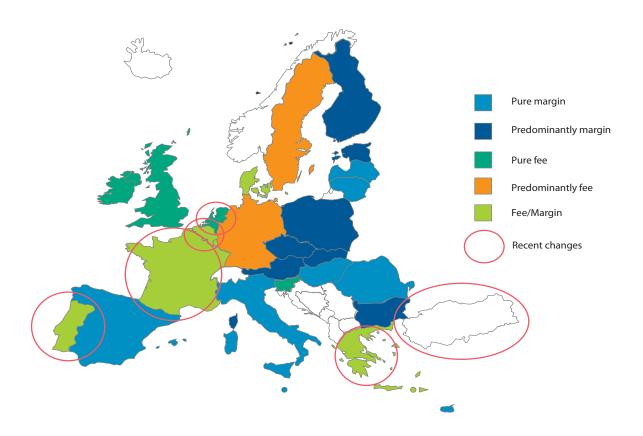


Fig.3.3 Summarization of the most common remuneration model for community pharmacies.

This evolution is partly aimed at separating the reward (for the holiday) from the price of the drugs (as shown in the blue part of the image), which means that the decrease in drug prices has less effect on the remuneration of pharmacies in the community. This is especially true as pharmacist representatives are not involved in the decision-making/negotiation of the price of the medicine, although this will affect their remuneration.

In 2013 the General Secretary of Pharmaceutical Group of the European Union (PGEU) presented an overview of the types of remuneration for dispensing within most countries in the WHO European Region (fig. 3.4) [42].



Source: World salaries

Fig.3.4 Overview of pharmacy remuneration related to dispensing.

As new clinical services are introduced, they may be offset by service charges, performance fees (e.g., when the goal of generic substitution in France is met) or per capita fee (as in the case of minor diseases in Scotland, United Kingdom). Some measures may also be considered to provide (financial) incentives to maintain a network of community pharmacies, especially in areas with poor access to medicines and pharmaceutical expertise (usually in rural areas).

Many countries have introduced professional pharmacy services, which are often subsidized by the national health care system [15]. These services aim to

Table 3.2

optimize drug therapy and improve patient outcomes by providing specialized knowledge in medication management. On the example of the studied literature, it is possible to cite the main models of reimbursement of expenses of pharmacies, which are used in different parts of the world (tabl.3.2) [1,14,44,51].

Pharmacy reimbursement models

Models	Fee-for-service	Capitation
Signs		
Description	healthcare providers are remunerated based on the volume of services they provide	reward method for medical services in which a fixed amount per person is paid for services, regardless of the nature or quantity of services, depending on the provider
Benefits for the pharmacist	The program incentivizes pharmacists to aggressively implement patient care services and determines compensation for professional care, as well as covering drug costs	for pharmacies getting cash payments at the start of accounting period, the capitation programm can limit pharmacy financial assistence by improving the continuity of cash flow. Reducing the burden on practicing pharmacists, since in most cases processing and filling out reporting documents is not required
Benefits for the patient	The service model ensures maximum care whether the service is needed or not	to retain these customers for the pharmacy, pharmacists improve the quality of care for their patients and reduce the cost of prescriptions. To save on medications, doctors will reduce the number of medications prescribed to patients with chronic diseases

Disadvantages	Fixed fees have a negative	Payers themselves choose a
	impact on the quality of the	pharmacy that operates a
	pharmacist's professional	capitated payment system.
	services, as they may still	The number of prescriptions
	receive payment when they	written does not affect the
	provide them. Another negative	pharmacist's compensation,
	point when using this model.	unlike the number of
	Patients often abuse prescribed	patients included in the
	medications, with extended	health care program.
	dosing of more than the patients	
	need, to increase their own	
	profits. On the other hand,	
	workers who are actively	
	involved in the process of	
	selecting prescription drugs and	
	monitoring patient compliance	
	are not reimbursed at all under	
	these procedures.	
Countries	Austria, Malta, Denmark,	Germany, Greece, Thailand,
	Spain, Norway, China, Turkey,	Switzerland, Poland,
	Switzerland, Hungary, Iceland	Netherlands, Romania,
		Burundi, Israel, Italy
	Compounding funding mo	dels
In a mixed p	harmacy benefit program, funding	sources may include the
government, priv	vate payers, and insurance compan	ies. The hybrid model solves
all the di	sadvantages that may arise when u	using a single model.
	Australia, New Zealand, Uk	K, US

When changing the remuneration model, factors affecting the activities of the pharmacy organization itself are taken into account.

The operating costs of an community pharmacy (to provide pharmaceutical services) typically include [37]:

• fixed assets (drug stocks, including capital costs);

- structure (minimum equipment and premises required for the provision of services and issuance);
- activities (these costs usually increase with the level of activity and consist, for example, of personnel and consumables);
  - investment from the outside and fair remuneration of the owner.

# 3.2. Analysis of the organization of current pharmacy services provided in European countries.

Currently, pharmacies use several pharmacist remuneration systems. This is due to the fact that the global pharmaceutical community today understands that the activities of pharmacies and the work of pharmacists should be appropriately remunerated. There is a trend towards reforming remuneration by linking it to the ancillary professional services provided by pharmacists, to whom a performance-based formula is applied, to the overall remuneration package. These services are provided not only to patients but also to other medical institutions, professionals, and sometimes payers. However, the expansion of remuneration for these services is not without its challenges. Examples include:

- payers' reluctance to pay for extended pharmacy services;
- restrictive eligibility criteria that limit access to services and the ability of pharmacists to provide them;
- termination of services due to annual or frequent negotiations with insurers; to determine who is responsible for measuring the quality of professional services [42].

A successful remuneration model is one that promotes sustainable development in the provision of professional services.

Payers of pharmaceutical services constantly analyze the consistency of their costs with content to ensure patients receive quality care at minimal cost. At the same time, to meet patient needs for new pharmacist-provided care.

Compliance with an effective regulatory framework governing pharmaceutical practice justifies the implementation of a professional model of patient care. Since universal coverage of health care services has become more expensive in recent years and therefore requires more financial investments, only under such conditions can a positive result be achieved. Experience shows that without investment in the global pharmaceutical workforce, sustainable remuneration models for pharmacists cannot be considered in the light of affordable quality [52–56].

The good remuneration of pharmacist work makes the profession popular and pharmacy a more attractive career choice, leading to a reduction in labor shortages. Vocational services should be supported by vocational education, which will lead to overall improvement of the entire health care system.

Using findings from relevant literature and WHO reports, we have identified the main areas of pharmacy services beyond its primary role in the supply of medicines.

These services have been organized and hierarchized into the following categories:

- Providing related services to facilitate access to medicines.
- Health promotion and disease prevention services.
- Screening and referral services.
- Disease treatment services.
- Personalized case management services.

In 2020, a survey was conducted of 32 member countries of the Pharmaceutical Group of the European Union regarding pharmacy services that are paid for by various participants in the process. We have selected, in our opinion, the most popular pharmaceutical services and compiled them into a table 3.3 according to categories. We have used different symbols to mark methods of regulation and payment for pharmacy services [20-24,49-56].

- **♣** Provided in most pharmacies under contract, agreement, regulation.
- Provided individually by some pharmacies.
- Regulatory limitations.
- € Remunerated by Government / Payer.

Table 3.3

C . 1	•	•	
Current pharmacy	SETVICES	111	Hurone
Current pharmacy	SCI VICCS	111	Luiopc
1 2			1

Services	Co	untri	es																		
	AT	BE	BG	CY	CZ	DE	DK	EL	ES	FI	FR	HR	HU	IE	LV	NL	NO	PL	SE	SK	Ul
DISPENSING SERVICE	S																				
Night services	+	€		€	€	€		+	€		€	€	+			€		•		<b>♦</b>	€
Emergency supply	+			+			+			•	+			<b>•</b>			+	+			+
POM without																					
prescription																					
Urgent supply of POM	+			+			+			•				<b>•</b>		+		+			€
without prescription																					
Repeat dispensing		+	€	€	€		•	+	€	+	€	€		€◆		+	+		€	•	
Generic Substitution		•		+	+	+	+	€	+	+	€		+	€◆	+	+	+	+	€	+	+
Refusal to dispense due		+							+	+	€			+		+	+			•	
to safety reasons																					
Home delivery		+			•	€	+				+					€	+		+		€
<b>HEALTH PROMOTIO</b>	)NS	ERV	<b>ICES</b>																		
Handling and Disposal		+			+		+	+	+	+	+	+	+	€		+	+	+	+	•	€
of Expired Medicines																					
Needle Exchange	+			+					€		+	+		€		+	€			•	€
Pharmacy Travel																+					
Health																					
Pharmacist-delivered						€	€			•	€										€
vaccination																					
Weight Management																					€
Smoking Cessation							€				+			+							
Health education											€	+		€							

																(	Contir	nuatio	on of	table	3.3
SCREENING AND REF Common Ailment Management Schemes	ERR	AL S	ERVI	CES						•	•								•	•	€
Screening individuals at-risk not on medication	•	•	•		•	•	•	•	+		€	•	•	€	•	•	•	+	•	•	•
Pharmacovigilance for medicines under additional monitoring		+			+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+
Referral to other healthcare providers			+						+												
DISEASE MANAGEM	1ENT	SEF	RVIC	ES																	
Supervised treatment/controlled drug consumption	€	€			+		+	+	+	+	€	+	+	€		+	€		+		€
First time dispensing intervention	+			+			•		€	•	+	+		€	•	€	€	•		•	€
Instruction on use of therapeutic, self-monitoring device	•		•	•		•	•	+	+		€	•		•	•	€	€	•	+	•	
Therapeutic adherence support		•					€				€			+		+	•		•	•	€
Teleconsultations by pharmacists											€					+			+		€
INDIVIDUAL CASE MA	ANA(	GEMI	ENT S	SERV	<b>ICES</b>																
Dose Administration Aid		+					+			€	+			€	€	€	+		€		+
Medication Review	€				+		€				€					€					€
Galenic formulation	+	€			€	€		€	€	€	+		€		€	€	€	€	€	€	

The top 7 most frequent pharmacy services provided in most pharmacies within the country under contract, agreement, legislation, or regulation were mostly dispensing related. This includes: generic substitution; pharmacovigilance for medicines under additional monitoring (17 countries); galenic formulation (14 countries); repeat dispensing for chronic long-term medications (12 countries); handling and disposal of expired or unwanted medicines (10 countries); night services (9 countries); and high-cost therapy dispensing and management such as for oncology, HIV, rheumatoid arthritis, multiple sclerosis (8 countries). Some of these services were reimbursed by the government or health care payer in some (but not all) countries outside the standard pharmacy dispensing remuneration. These include: galenic formulation; repeat dispensing for chronic medications; high-cost therapy dispensing and management; night services. A few countries remunerate generic substitution.

The next tier of the 5 most frequent pharmacy services provided in most pharmacies within the country under contract, agreement, legislation, or regulation were also dispensing related (with one exception of medication review): emergency supply of prescription-only medicines without prescription such as adrenalin or salbutamol (12 countries); medication review (11 countries); urgent supply of prescription only-medicines without prescription (10 countries); refusal to dispense due to safety reasons (10 countries); and home delivery (10 countries). Medication review – the only service in this set beyond the dispensing role - is already reimbursed by the government or health care payer outside the standard pharmacy dispensing remuneration in 7 out of 11 countries providing this service in most pharmacies. Home delivery is also reimbursed in 4 countries with a relevant regulatory upgrade in Germany due to the COVID-19 pandemic.

The third tier of the 8 most frequent pharmacy services provided in most pharmacies within the country under contract, agreement, legislation, or regulation embraces a very different and wide spectrum which goes far beyond the dispensing role. This includes: dose administration aid (8 countries); instruction on the use of therapeutic or self-monitoring devices (8 countries); needle/syringe exchange (8

countries); pharmacist-delivered vaccination (7 countries); directly observed treatment / supervised consumption of medicines (7 countries); first time dispensing intervention (5 countries); therapeutic adherence support (5 countries); integrated care pathways, protocols or quality circles with primary care (5 countries). This is a very different set of services and all are already reimbursed by the government or health care payer outside the standard pharmacy dispensing remuneration although in some (but not all) countries.

The last tier of pharmacy services provided in most pharmacies within the country under contract, agreement, legislation, or regulation includes: smoking cessation (4 countries); chronic disease management (3 countries); therapeutic substitution (3 countries); health education (3 countries); teleconsultations by pharmacists (3 countries); common / minor ailment management schemes (2 countries); screening at-risk individuals (2 countries); medication reconciliation (2 countries); scheduling visits; weight management (2 countries). Smoking cessation, chronic disease management, common/minor ailment management, home or nursing home medication review and weight management are reimbursed by the government or health care payer outside the standard pharmacy dispensing remuneration in at least one country.

## 3.3. Organization of remuneration of employees in Morocco

Good pharmacy practice requires that the well-being of the patient in all situations and of society as a whole be the pharmacist's primary concern. It should strive to provide medicines that meet international standards of production and storage; as well as other health care products and services and make the most of them. For the profession of pharmacist, there must be a modern, avant-garde code developed by public authorities in active consultation with representatives of the profession in order to meet their socio-economic, legal and professional expectations [11,19].

Currently, Morocco's pharmaceutical sector is in decline and the profession is in crisis.

The pharmacy sector, which is one of the strong links of the national health system, as well as the ongoing reform of the sector, has suffered from a number of problems caused by financial problems for several years. Of the 12,000 community pharmacists in Morocco, more than 3,000 say they are on the verge of bankruptcy [2,33].

The second problem of the industry is related to its organization, the government has no contacts in the pharmacy sector.

The analysis of margins in a broader definition, which can be called pharmacy remuneration, becomes important for meaningful measurement of performance and representation in pharmacies in Morocco. The markup, or pharmacy fee, refers to the difference between the sales of all products in the pharmacy and their purchases.

It also takes into account other elements of remuneration, such as commercial cooperation, group discounts and remuneration based on public health objectives, including dispensing fees.

"Pharmacy fees" for reimbursable medicines are divided into four categories:

- 1. Administrative margin is derived from a smoothed decreasing margin scale. It is this level of margin that is affected by the level of drug prices. The latest developments and, especially, the new stage from 01.01.2019 are moving towards replacing this markup with issuance commissions divorced from prices [2].
- 2. Vacation fees are no longer related to the price of medicines, but to their quantity (number of packages, prescriptions).
- 3. Additional payments to the margin due to discounts, and commercial cooperation. The additional margin is achieved mainly through discounts on generics. They represent a very significant level, which makes the pharmacy financially very dependent.
- 4. Remuneration for pharmaceutical services within the framework. Remuneration based on public health objectives, in particular a generic bonus. Eventually, this category should increase by offering complementary pharmaceutical services, but it is struggling to develop due to the current lack of remuneration for these services.

The remuneration of a pharmacist in Morocco consists of three main elements: economic profit, basic shipping fee, and possibly a special fee for a specific pharmaceutical treatment [2,34].

The delivery fee for reimbursable pharmaceutical products consists of three separate parts.

## **Level 1 – Economic Margin**

Economic margin is intended to cover expenses related to economic activities. It is related to the factory price of pharmaceutical products. This economic profit is included in the selling price of the drug.

#### Level 2 - Base Board

The amount of the base fee is equivalent to the product of the value established in the contract between pharmacists and mutual insurance companies and the coefficient assigned to this category.

# **Level 3 – Fee for Specialty Pharmacy Care**

For specific pharmaceutical care during the provision of reimbursable pharmaceutical care and subject to certain conditions, "special" fees.

Special fees are not part of the price of the medicine; health insurance covers them in full.

The average gross profit margin of a pharmacist is 27% and includes:

- 33.9% margin on the T1 tranche (medicines costing from 0 to 300 dirhams). This category represents 80% of pharmacists' sales;
  - margin of 29.7% on T2 (medicines costing from 300 to 1000 dirhams);
- a flat rate of AED 300 for a T3 drug (medicines costing between AED 1000 and AED 3000);
  - a flat rate of AED 400 per T4 (medicines whose price exceeds AED 3000);
- A 15% markup on baby milk, as well as some markup on parapharmaceutical products.

When taxes, fees and salaries are deducted, the net margin drops to 8%. Out of 100 dirhams earnings, the pharmacist receives only 8 dirhams.

Currently, the sector is worth AED 12 billion per year and 12,000 pharmacists each earn an average of one million dirhams per year. The gross profit is AED 270,000 per year and the average net profit is around AED 80,000 per year.

In Morocco, a country where drug prices are determined based on a seven-country benchmark (6 countries plus country of origin), community pharmacist and packaging margins have been established Resolution 2-13-852 on the conditions and procedure for setting the public sale price local or imported medicines. This law was published on December 18, 2013 [2,34,41].

Pharmacist remuneration in Morocco has become based solely on two bonuses:

- commercial (T1: 33.93% or T2: 29.74%);
- two packages' medicines (PM) (T3: 300 DH and T4: 400 DH).

On a medicine whose price is 3000 DH, the pharmacist receives a flat rate of 300 DH this which corresponds to a gross margin of 10%. On a medicine whose price exceeds 40,000 DH, the pharmacy receives a flat rate of 400 DH which corresponds to a gross margin of less than 1% (fig.3.5) [31].

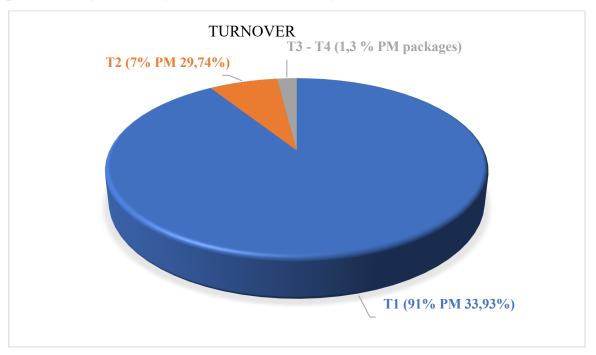


Fig. 3.5 Distribution of turnover according to margins and packages.

Main tasks of a pharmacist in Morocco

- Dispenses and compounds prescribed medications, drugs, and other pharmaceuticals for patient care, according to professional standards and State and Federal legal requirements.
- Reviews prescriptions issued by physician, or other authorized prescriber; assures accuracy and determines formulas and ingredients needed.

In September 2022, the Implementation Ordinance adopted by the Government Council on September 1, 2022 was published in the Official Gazette. This decree changes the index scale, allowing different categories to start their professional careers with index 509 (doctoral degree) instead of index 336 (Bac+5), with all the benefits that this entails. The salaries of doctors, pharmacists and dental surgeons will increase first by at least 3000 dirhams from January 1, 2023, and then a second increase is scheduled for early 2024 [2,31,36,41].

More specifically, the application of Index 509 provides for an increase in:

- AED 3967 for doctors of the first category, whose current salary reaches AED 8836.
- AED 3825 for doctors in the main category, whose current salary is AED 12430.
- AED 3805 for doctors of the highest category, whose current salary reaches AED 15068.
  - AED 3604 for mid-level doctors who have a current salary of AED 18796.

Thus, from January 2023, pharmacists of the first category will actually receive a net salary of AED 12,803 per month. The main category will receive a salary of 16,255 dirhams, the highest category - 18,873 dirhams and the lower category - 22,400 dirhams per month [31].

It should be remembered that this increase is part of the agreement signed with the health sector unions on April 30, 2022, and covers several points, most notably the improvement of the situation of doctors and pharmacists by modifying the indicative grid for this category so that it starts with an index of 509 and all its compensations [31]. We have reflected the main skills of a pharmacist that affect the

level of his salary in graph 3.6; the main one is informing the patient when dispensing prescription drugs.

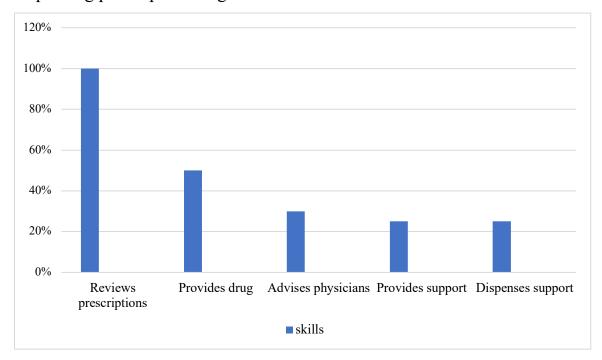


Fig. 3.6 Top 5 skills for pharmacist.

Experience level is the most important factor in determining salary. The more years of experience, the higher the salary. We've broken down salaries by experience level for people working as pharmacists (fig3.7) [31,46].

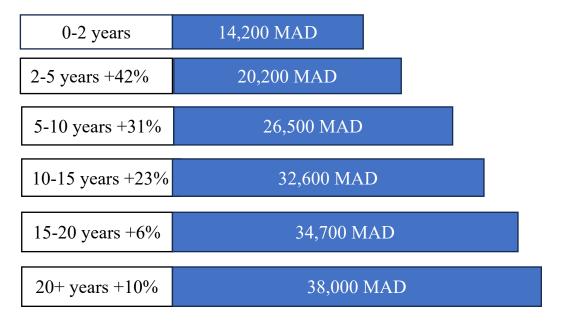


Fig.3.7 Salary Comparison by Years of Experience

The average pay for a pharmacist is MAD 224,138 a year and MAD 108 an hour in Morocco. The average salary range for a pharmacist is between MAD

151,742 and MAD 281,294. On average, a Doctorate Degree is the highest level of education for a pharmacist. This compensation analysis is based on salary survey data collected directly from employers and employees in Morocco [31,33].

### **Conclusions to Chapter III**

Financing of pharmacy services refers to the mechanisms and sources of financing that ensure the provision of these services in the health care system. Funding mechanisms may vary from country to country and from health system to health system. A report by the International Pharmaceutical Federation states that the best-paid services include prescription drug preparation, medication reviews and vaccinations at community pharmacies. Only 13 countries pay for pharmacy services, suggesting an improvement in the use of medicines. Remuneration is paid for those services that include clinical decision-making, initiation, continuation, and modification of treatment.

As long as the pharmacist's income in Morocco remains directly correlated to the figures it achieves on each tranche [T1 (margin gross: 33.93), T2 (gross margin: 29.75), T3 (Flat rate of 300 DH) and T4(fixed price of 400 DH)], any drop in the prices of medicines which only targets the pharmacist and without compensation, will be accompanied inevitably a drop in pharmacists' income, knowing that at least a third of Moroccan pharmacists know serious economic difficulties.

Comparing the income of pharmacists in Morocco and practitioners in neighboring countries, one can highlight the difference in restrictions pharmacist markups on medicines and concealment of the rest current remuneration methods and sales volume in these countries can only come to biased conclusions.

#### **GENERAL CONCLUSION**

- 1. Most European countries use a method of remuneration for pharmacists that includes a fixed unit cost and a percentage dependent on the cost of purchasing or delivery of drugs. The percentage component may be fixed, regressive or capped for expensive drugs and acts as a deterrent to the dispensing of generic drugs.
- 2. Background Pharmacist-led cognitive services are increasingly needed in primary care as a response to patient-centered care. However, PLCS implementation level and reward models are either missing or not defined.
- 3. The availability of PLCS is increasing and varies across Europe and there are significant differences in the level of service implementation. PLCS remuneration also applies, but does not have a clear pattern that links the provision of services to payment.
- 4. Pharmacies in Europe use a variety of pharmaceutical services that go far beyond the scope of dispensing and some services are already paid in some countries. It admits the role of pharmacies in health promotion, screening, diseases and in case management.
- 5. These results are consistent with the recommendations described in the analytical papers integrated patient-centered and more cost-effective primary care models incentives that pursue the expansion of the role of pharmacy services.
- 6. The most frequent pharmacy services, which are provided in the majority of countries in most pharmacies by contract, agreement, legislation and regulations mostly related to dispensing as this is the primary role of pharmacies. Some of them services are reimbursed by the government or an out-of-state health care payer standard pharmacy fee for dispensing.
- 7. These services reflect priorities considering effectiveness (generic replacement), safety (pharmacovigilance), pharmacy experience in the preparation of individual therapy or therapy with a short shelf life (galenic composition), access to medicines outside working hours (night services).

- 8. Countries England, France, Germany, Ireland, and Switzerland have well-established reimbursement systems that recognize and compensate community pharmacies for the services they provide. Japan and New Zealand primarily rely on dispensing fees as the main source of remuneration for community pharmacies. In Australia, the reimbursement system for community pharmacies presents a balance between fair compensation for pharmacies and affordable access to medications for patients.
- 9. Overall, the establishment of effective and fair reimbursement systems for community pharmacies is essential for the sustainability and growth of pharmacy services worldwide. It encourages pharmacists to expand their roles beyond dispensing and actively engage in patient care, ultimately contributing towards a better healthcare system.
- 10. In Morocco, the remuneration of hired pharmacists is regulated by the collective agreement of the pharmacy. It distinguishes different categories of personnel using coefficients, and also takes into account the number of years of service.
- 11. Pharmacist draws his income solely from the commercial margin he receives on each medication he dispenses. The average pay for a pharmacist is MAD 224,138 a year and MAD 108 an hour in Morocco. The average salary range for a pharmacist is between MAD 151,742 and MAD 281,294. On average, a Doctorate Degree is the highest level of education for a pharmacist. This specificity makes it dependent on the turnover it achieves from the sale of medicines.

#### REFERENCES

- 1. Impact of community-pharmacist-led medication review programmes on patient outcomes: a systematic review and meta-analysis of randomised controlled trials / B. Al–Babtain et al. *Res Soc Adm Pharm*. 2021. Vol. 18. P. 2559.
- 2. Average Staff Pharmacist Salary in Morocco for 2024. URL: https://www.salaryexplorer.com/average-salary-wage-comparison-morocco-pharmacist-c146j593#google vignette (Date of accesse: 30.04.2024).
- 3. Bates I., Bader L. R., Galbraith K. A global survey on trends in advanced practice and specialisation in the pharmacy workforce. *Int. J. Pharm. Pract.* 2020. Vol. 28. P. 173.
- 4. Baird B., Beech J. Community pharmacy explained. 2020. URL: https://www.kingsfund.org.uk/publications/community-pharmacy-explained (Date of accesse: 30.04.2024).
- 5. A comparative analysis of remuneration models for pharmaceutical professional services / C. Bernsten et al. *Health Policy*. 2020. Vol. 95(1). P. 1–9.
- 6. Medication review practices in European countries / A. Bulajeva et al. *Res Social Adm Pharm.* 2014. Vol. 10(5). P. 731–40.
- 7. Buswell G. A guide to the healthcare system in the Netherlands. 2021. URL: https://www.expatica.com/nl/healthcare/healthcare- basics/healthcare-in-the-netherlands-100057/ (Date of accesse: 30.04.2024).
- 8. Council of Europe Committee of Ministers Resolution CM/Res(2020)3 on the Implementation of Pharmaceutical Care for the Benefit of Patients and Health Services. URL: https://go.edqm.eu/CMRes20203 (Date of accesse: 30.04.2024).
- 9. Condinho M., Ramalhinho I., Sinogas C. Smoking Cessation at the Community Pharmacy: Determinants of Success from a Real-Life Practice. *Pharmacy*. 2021. Vol. 9. P. 143.
- 10. Provision of pharmaceutical care by community pharmacists across Europe: is it developing or spreading? / F. Costa et al. *J. Eval Clin. Pract.* 2017. Vol. 78. P. 234–242. DOI: 10.1111/jep.12783 (Date of accesse: 30.04.2024).

- 11. Community Pharmacy 2025. URL: https://www.guild.org.au/\_\_data/assets/pdf\_file/0022/45454/PGA\_CP2025\_intropaper (Date of accesse: 30.04.2024).
- 12. Decent work and the 2030 Agenda for sustainable development / International Labour Organization. URL: https://www.ilo.org/topics/decent-work-and-2030-agenda-sustainable-development (Date of accesse: 30.04.2024).
- 13. Directive 2005/36/EC of the European Parliament and of the Council of 7 September 2005 on the recognition of professional qualifications. *O.J.E.U.* 2005. Vol. 255. P. 22–142.
- 14. Dineen-Griffin S., Benrimoj S. I., Garcia-Cardenas V. Primary health care policy and vision for community pharmacy and pharmacists in Australia. *Pharm Pract (Granada)*. 2020. Vol. 18(2). P. 1967.
- 15. European Directorate for the Quality of Medicines HealthCare of the Council of Europe. Fact-Sheet Activities under CD-P-PH. URL: https://www.edqm.eu/documents/52006/289969/Fact+sheet+-+Activities+under+CD-P-PH.pdf/5c258d66-22f9-4af5-806e-185e1c3dc481?t=1657028962065 (Date of accesse: 30.04.2024).
- 16. European Directorate for the Quality of Medicines and HealthCare of the Council of Europe. The EDQM Pharmaceutical Care Quality Indicators Project. 2017. URL: https://freepub.edqm.eu/publications/AUTOPUB\_25/detail (Date of accesse: 30.04.2024).
- 17. European Directorate for the Quality of Medicines and HealthCare of the Council of Europe. Council of Europe Resolution on the Implementation of Pharmaceutical Care—Content and Added Value of the Resolution and Insights on How to Implement it at National Level. URL: https://www.edqm.eu/en/-/webinar-of-pharmaceutical-care-a-step-forward-in-the-promotion-of-pharmaceutical-care-in-europe (Date of accesse: 30.04.2024).
- 18. European Directorate for the Quality of Medicines & HealthCare of the Council of Europe. The Implementation of Pharmaceutical Care in Daily Practice in SEEHN Member States. Survey Report. 2023. URL: https://www.edqm.eu/en/-

/implementation-of-pharmaceutical-care-in-daily-practice-in-south-eastern-europe-health-network-seehn-member-states-1 (Date of accesse: 30.04.2024).

- 19. FIP. Community pharmacy at a glance 2021, Regulation, Scope of Practice, remuneration and distribution of medicines through community pharmacies and other outlets. 2021, International Pharmaceutical Federation: The Hague, The Netherlands. URL: https://www.fip.org/press-releases?press=item&press-item=104 (Date of accesse: 30.04.2024).
- 20. Rabia Hussain Zaheer–Ud-Din Babar. Global landscape of community pharmacy services remuneration: a narrative synthesis of the literature. *Journal of Pharmaceutical Policy and Practice*. 2023. Vol. 118. P. 202–220.
- 21. Evaluation of a new patient consultation initiative in community pharmacy for ear, nose and throat and eye conditions / G. Hall et al. *BMC Health Serv. Res.* 2019. Vol. 19. P. 285.
- 22. Paying pharmacists for patient care: A systematic review of remunerated pharmacy clinical care services / S. K. Houle et al. *Can Pharm. J. (Ott)*. 2014. Vol. 147(4). P. 209–32.
- 23. International Pharmaceutical Federation. From Making Medicines to Optimising Outcomes: The Evolution of a Profession 1912–2012. 2012. URL: https://www.fip.org/file/1379 (Date of accesse: 30.04.2024).
- 24. International Pharmaceutical Federation. The FIP Workforce Transformation Programme (WTP). URL: https://www.fip.org/files/fip/PharmacyEducation/2019/FIP-WTP-program-web (Date of accesse: 30.04.2024).
- 25. International Labour Organisation (ILO) Database of Conditions of Work and Employment Laws. URL: www.ilo.org/dyn/travail/travmain.home (Date of accesse: 30.04.2024).
- 26. PRACTISE—PhaRmAcist-led CogniTIve Services in Europe—a survey on remuneration of pharmacist-led cognitive services with a focus on medication review: study protocol and pilot study / T. Isenegger et al. *Int. J. Clin.*

- *Pharm.* 2017. Vol. 39. P. 208. DOI: 10.1007/s11096-016-0404-4 (Date of accesse: 30.04.2024).
- 27. Jackson J., Urick B. Performance-based pharmacy payment models: the case for change. *Aust Health Rev.* 2019. Vol. 43(5). P. 502–7.
- 28. Funding for change: New Zealand pharmacists' views on, and experiences of, the community pharmacy services agreement / H. Kinsey et al. *Int J. Pharm. Pract.* 2016. Vol. 24(6). P. 379–89.
- 29. Labour market and wage development Statistics, 2020. URL: http://ec.europa.eu/economy\_finance/indicators/labdev/stats/index\_en.html. (Date of accesse: 30.04.2024).
- 30. Labour productivity growth in the total economy, 2020. URL: http://stats.oecd.org/Index.aspx?DatasetCode=LEVEL. (Date of accesse: 30.04.2024).
- 31. Les salaires des médecins revalorisés à partir du 1er janvier 2023: voici la nouvelle grille. URL: https://fr.le360.ma/societe/les-salaires-des-medecins-revalorises-a-partir-du-1er-janvier-2023-voici-la-nouvelle-grille-267018/ (Date of accesse: 30.04.2024).
- 32. Dispensing of prescribed medicines in Swiss community pharmacies—observed counselling activities / K. A. Maes et al. *Pharmacy (Basel)*. 2019. Vol. 7(1). P. 1.
- 33. Martins S. F., Mil J. W., Costa F. A. The organizational framework of community pharmacies in Europe. *Int. J. Clin. Pharm.* 2015. Vol. 37(5). P. 896–905.
- 34. Marges réduites, représentativité, menaces de faillite. Round up sur la crise dRes pharmacies d'officine. URL: https://medias24.com/2023/03/23/marges-reduites-representativite-menaces-de-faillite-round-up-sur-la-crise-des-pharmacies-dofficine/ (Date of access: 30.04.2024).
- 35. Moroz O. Organization of remuneration of labor of hired workers in Ukraine: situation and problematic aspects. *Economics Education*. 2021. Vol. 6(4). P. 124–136.

- 36. Reimbursement for pharmacist-provided health care services: a multistate review / E. Nguyen et al. *J. Am. Pharm. Assos.* 2021. Vol. 61(1). P. 27–32.
- 37. Nutescu E. A., Klotz R. S. Basic terminology in obtaining reimbursement for pharmacists' cognitive services. *American journal of health-system pharmacy*. 2007. Vol. 64(2). P. 186–92.
- 38. NHS England. Structured Medication Reviews and Medicines Optimisation: Guidance. 2020. URL: https://www.england.nhs.uk/wp-content/uploads/2021/03/B0431-network-contract-des-smr-and-mo-guidance-21-22 (Date of access: 30.04.2024).
- 39. OECD (2021), Strengthening the frontline: How primary health care helps health systems adapt during the COVID 19 pandemic, OECD Policy Responses to Coronavirus (COVID–19). DOI: 10.1787/9a5ae6da-en (Date of access: 30.04.2024).
- 40. OECD (2020), Realising the Potential of Primary Health Care, OECD Health Policy Studies. DOI: 10.1787/a92adee4-en (Date of access: 30.04.2024).
- 41. Pharmacies: Moyennes professionnelles 2019. URL: https://kpmg.com/fr/fr/home/insights/2019/09/moyennes-professionnelles-pharmacies (Date of access: 30.04.2024).
- 42. Moniz Egas. Pharmacy services in Europe: evaluating trends and value. Report. Lisboa, 2020. 107 p.
- 43. Pratama Wildan, Avian Arik Prasetya. Effect of Remuneration System on Job Satisfaction and Work Motivation in Higher Education. *Journal of Business Administration (JAB*). 2017. Vol. 46(1). P. 125–135.
- 44. Remuneration: everything HR professionals need to know. URL: https://www.kenjo.io/hr-remuneration-guide (Date of accesse: 30.04.2024).
- 45. Sanyal C., Husereau D. Systematic Review of Economic Evaluations of Services Provided by Community Pharmacists. *Applied Health Economics and Health Policy*. 2020. Vol. 18. P. 375–92. URL: https://pubmed.ncbi.nlm.nih.gov/31755015/ (Date of accesse: 30.04.2024).

- 46. Schulz M., Griese–Mammen N., Müller U. Clinical pharmacy services are reimbursed in Germany: challenges of real-world implementation remain. *Int. J. Clin. Pharm.* 2023. Vol. 45(1). P. 245–9.
- 47. The legal and regulatory framework for community pharmacies in the WHO European Regionhttps. URL: //iris.who.int/bitstream/handle/10665/326394/9789289054249-eng (Date of accesse: 30.04.2024).
- 48. The gender pay gap in the health and care sector. A global analysis in the time of COVID–19 / World Health Organization and International Labour Organization. 2022. 176 p. URL: https://www.who.int/publications/i/item/9789240 052895 (Date of accesse: 30.04.2024).
- 49. Unit Labour Costs— Annual Indicators. 2020. URL: http://stats.oecd.org/Index.aspx?queryname=347&querytype=view. (Date of accesse: 30.04.2024).
- 50. Wang Y., Yeo Q. Q., Ko Y. Economic evaluations of pharmacist-managed services in people with diabetes mellitus: A systematic review. *Diabet Med.* 2016. Vol. 33(4). P. 421–7. URL: https://pubmed.ncbi.nlm.nih.gov/26433008/ (Date of accesse: 30.04.2024).
- 51. World Health Organization. The Role of the Pharmacist in the Health Care System. 1994. URL: https://apps.who.int/iris/handle/10665/59169 (Date of access: 30.04.2024).
- 52. World Health Organization. Joint FIP/WHO Guidelines on Good Pharmacy Practice: Standards for Quality of Pharmacy Services. 2011. URL: https://www.who.int/docs/default-source/medicines/norms-and-standards/guidelines/distribution/trs961-annex8-fipwhoguidelinesgoodpharmacypractice (Date of access: 30.04.2024).
- 53. World Health Organization. Medication Safety in Transitions of Care. 2019. URL: https://www.who.int/publications/i/item/WHO-UHC-SDS-2019.9 (Date of access: 30.04.2024).

- 54. World Health Organization. Assessing the Magnitude and Nature of Shortages of Essential Medicines and Vaccines: Focus on the WHO European Region.

  2020. URL:
- https://apps.who.int/iris/bitstream/handle/10665/337965/WHO-EURO-2020-1733-41484-56575-eng.pdf?sequence=1&isAllowed=y (Date of access: 30.04.2024).
- 55. WHO Regional Office for Europe. Integrated care models: an overview. 2016. URL: http://www.euro.who.int/pubrequest (Date of access: 30.04.2024).