# SEDATIVE MEDICINES REGISTERED IN THE REPUBLIC OF UZBEKISTAN

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Abstract---Sedative medicines are generally used to treat diseases of the nervous system. The effect of sedatives is in the regulation of excitation processes and activation of inhibition in the brain. These medicines have moderate calming and antianxiety effects. They do not have any serious side effects, do not cause dependency and are the most frequently prescribed in the treatment of light neuroses. The analysis of the assortment of sedative medicines registered in the Republic of Uzbekistan showed that in the pharmaceutical market of Uzbekistan sedatives are presented in such dosage forms as tinctures, medicinal plant raw materials, syrups, capsules and tablets. The aim of the present work is to analyze the pharmaceutical market and the dosage forms of the sedative medicines, registered in Uzbekistan, CIS and foreign countries, so that to offer a new medication with sedative effect. Basing on the fact that the share of sedatives, registered in Uzbekistan in the form of syrups makes only 3 medications (from the number of domestic production), 1 medication (from the total number of production of CIS countries) and 5 medications (from the total number of foreign drugs), it is advisable to create a sedative medicine of plant origin in the form of a syrup. Materials and methods. For performing of the research work materials were used, given in "the State Register of medicines, medical products and medical equipment permitted for application in medical practice of the Republic of Uzbekistan" dated 2015-2019 (№ 19-23). [2-6]. Experimental part presents the analysis's of the assortment of SMs (sedative medicines) registered in Uzbekistan, CIS and foreign countries, according to their dosage forms and using of content analysis of data on registration of the pharmacotherapeutic group (ATX Code - N05C). For providing accelerated development of the pharmaceutical industry and expansion of the domestic market with domestic medicines produced of local raw materials, a new medication on the base of "Phlegmen" sedative collection was offered for production. This sedative medicine was developed by the associates of the Tashkent Pharmaceutical Institute, successfully passed clinical tests and is produced in the Republic of Uzbekistan by SORB-TEH LLC, Uzbekistan.

**Keywords---**Content analysis, assortment, sedatives, sedative medicines, the State Register of Medicines, "Flegmen" syrup.

#### I. Introduction

For a long time, sedatives were used to treat diseases of the nervous system. The mechanism of their action is presented by their regulatory effect on the functional activity of the brain - suppression of excitation processes and activation of inhibition. These medicines have moderate calming and antianxiety effects. There is no sleeping effect in this group of medicines, they ease the sleep setup and help to its deeper and calmer process. Also they are successfully endured by the patients and do not have any serious side effects; do not cause dependency, physical or psychological addiction.

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One of the field of applications of sedatives are light neuroses. Sedatives are the most "ancient" medicines used to treat nervous-mental diseases. But nowadays, despite their considerable age, these medicines are not givingup their positions, as well ascomingforward, due to the factthat new means appear among them, continuing the traditions of old, well-recommended medicines. The indications for their application are very broad, these medicines are the most frequently prescribed in the world [1].

The modern pharmaceutical market of Uzbekistan is characterized by the steady growth of the commodity nomenclature. The last decade has seen a significant expansion, replenishment and deepening of the range of all general medical and pharmaceutical products. Especially this trend is represented for medicines. Increase of commodity nomenclature is more connected with registration in the pharmaceutical market of the Republic of Uzbekistan of a large amount of the reproduced medicinal products - generics (genericmedicines) of foreign and domestic manufacturers. It hassignificantly increased the possibility of choosing the necessary medications considering modern approaches in pharmacotherapy of various pathological conditions, individual features of the diseases course and consumer preferences of the end-users.

In this regard, it was relevant to perform a content analysis of sedative medicines assortment registered in the Republic of Uzbekistan.

# II. Materials and methods

For carrying out the present research work data, given in "the State Register of medicines, medical products and medical equipment permitted for application in medical practice of the Republic of Uzbekistan" dated 2015-2019 (№ 19-23). [2-6], were used.

## **Experimental part**

The presentarticleanalyses the assortment of SMs (sedative medicines) registered in Uzbekistan, with using of content analysis of data on registration of the pharmacotherapeutic group (ATX Code - N05C).

The SMsassortment in the State Register for 2015 is represented by 73 assortment items taking into account trade names, international generic names, dosage forms, doses and manufacturers with such dosage forms as solutions, capsules, drops, syrups, tablets, medicinal plant raw materials and tinctures. From 2015 to 2019 the assortment increased from 73 to 100 assortment positions at the expense of medicines of domestic producers. In 2015 and 2016, the assortment of sedatives decreased by 1 and 3 assortment items, respectively. In 2017, the growth compared to 2014 was 22.9%, in 2018 - 18.9%. In 2019, the assortment increased to 100 assortment items. Dynamics of SMs assortment change for 2015-2019 is shown in the Table 1.

Table 1. Assortment of sedative medicines, registered in the State Register of the Republic of Uzbekistan

№	State Register of the Republic	Medicines of	Medicines of CIS	Foreign medicines	
	of Uzbekistan	domestic	countries		Total
		production	production		
1.	№19 (2015)	29	25	19	73
2.	№20 (2016)	28	23	20	71
3.	№21 (2017)	45	25	21	91
4.	№22 (2018)	43	24	21	88

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5.	№22 (2019)	47	27	26	100

As it is seen in the Table 1. the share of medicines of CIS countries production varies from 23 to 27 items, the share of foreign medicines accounts from 19 to 26 items, the dynamics of which practically did not change during 2015-2019. In the same period, the share of domestic producers increased from 29 to 47 items.

The Table 2. shows SMs of domestic production, included into the State Register of the Republic of Uzbekistan for 2019 (No. 23) [6].

Table 2. Sedative medicines of domestic production registered in the Republic of Uzbekistan

№	Name of medicines	Dosage form	Manufacturer
TIN	ICTURES		
1.	VALERIAN-LIK TINCTURE	Tincture 20, 30, 40, 50 ml	Lekinterkaps, LLC, Uzbekistan
2.	VALERIAN TINCTURE	Tincture25, 40, 50 ml	ZIYO NUR FARM, PE, Uzbekistan
3.	VALERIAN TINCTURE	Tincture 20, 25, 40, 50 ml	RemedyGroup, Uzbek-British
			JVLLC,Uzbekistan
4.	VALERIAN TINCTURE	Tincture 15, 20, 25, 40, 50 ml	Radiks, PSPE, Uzbekistan
5.	VALERIAN TINCTURE	Tincture 20, 25, 40, 50 ml	AVICENNA, LLC, Uzbekistan
6.	VALERIAN TINCTURE	Tincture 15, 20, 25, 40, 50 ml	Galenika, LLC, Uzbekistan
7.	VALERIAN TINCTURE	Tincture25, 30, 40, 50 ml	GracePharma, LLC,Uzbekistan
8.	CARDIOGALEN-NGP	Tincture25, 30,50 ml	Neogalenpharm, FELLC, Uzbekistan
9.	CARDIOLEKZIN-ZNF	Tincture 25, 40,50 ml	ZiyoNur Farm, PE, Uzbekistan
10.	CARDIOLEX	Tincture 25,50 ml	Aktash, PE, Uzbekistan
11.	CARDIOSTIM	Tincture 25, 30, 40, 50 ml	Bioton, LLC, Uzbekistan
12.	OPTICARD-LIK	Tincture 25, 50 ml	Lekinterkaps, LLC, Uzbekistan
13.	MOTHERWORT-LIK	Tincture 25, 50 ml	Lekinterkaps, LLC, Uzbekistan
14.	MOTHERWORT TINCTURE	Tincture 25, 30, 40, 50 ml	GracePharma, LLC, Uzbekistan
15.	MOTHERWORT TINCTURE	Tincture 25, 40, 50 ml	ZIYO NUR FARM, PE, Uzbekistan
16.	MOTHERWORT TINCTURE	Tincture 25, 30,50 ml	Mediopharm, LLC, Uzbekistan
17.	MOTHERWORT TINCTURE	Tincture 20, 25, 40, 50 ml	AVICENNA, LLC, Uzbekistan
18.	MOTHERWORT TINCTURE	Tincture 20, 25, 40, 50 ml	RemedyGroup, Uzbek-British JV
			LLC,Uzbekistan
19.	MOTHERWORT TINCTURE	Tincture 25, 40, 50 ml	Radiks, PSPE, Uzbekistan
20.	MOTHERWORT TINCTURE	Tincture 25 ml	Neogalenpharm, FE LLC,Uzbekistan
21.	MOTHERWORT TINCTURE	Tincture 25, 50 ml	Aktash, PE, Uzbekistan
22.	TRIOGALEN	Tincture 25, 40, 50 ml	Avicenna, LLC, Uzbekistan
23.	TRIOGALEN	Tincture 20, 25, 40, 50 ml	Galenika,LLC, Uzbekistan
CA	PSULES	•	
1.	VALISED-LIK	Capsules N10, N30	Lekinterkaps, LLC, Uzbekistan
2.	SEDONIK® NPH	Capsules N10, N20, N30	NikaPharm, SBE, Uzbekistan

3.	STRESSNET	Capsules N10, N20, N30	NikaPharm, SBE (packaging) Krasnaya
			Zvezda, OJSC, Ukraine (manufact.),
			Uzbekistan
4.	PERSON	Capsules N10, N20	Kamol Med Farm, LLC (packaging)
٦.	TERSON	Capsules 1010, 1020	NabrosPharma Pvt. Ltd., India (manufact.)
go			Uzbekistan
	LUTIONS AND DROPS		
1.	CORVALOL- NGP	Drops for oral use 25, 30 ml	Neogalenpharm, FE LLC, Uzbekistan
2.	SEDANORM-LIK	Solution for ingestion 25, 30, 40, 50,	Lekinterkaps, LLC, Uzbekistan
		90, 100 ml	
TA	BLETS ANDDRY EXTRACTS		
1.	LOTOSED ATM	Coated tablets N20, N30	ATM Pharm, LLC, Uzbekistan
2.	PALORA®	Coated tablets N10, N20, N30, N40,	Nobel-Pharmsanoat, FE, Uzbekistan
		N50	
3.	SEDAREM	Coated tablets N10, N20, N30	RemedyGroup, Uzbek-British
			JVLLC,Uzbekistan
4.	LEOGLICYRFLOM	Dry extract 30 gr, 50 gr,100gr, 500 gr	O'zkimyofarm, JSCafter the name of
			S.K.Islambekov, Uzbekistan
5.	PALORA® NIGHT	Coated tablets300 mg N10	Nobel-Pharmsanoat, FE LLC, Uzbekistan
6.	PALORA® ULTRA	Coated tablets 200 mg N10, N20,	Nobel-Pharmsanoat, FE LLC, Uzbekistan
0.	TALORAS OLTRA	N30 (blister pockets)	Nobel-1 Harrisanoat, FE LLC, Ozbekistan
ME	 DICINAL PLANT RAW MATERIA	_	
1.	MELISSA MEDICINAL HERB	Medicinal plant raw material 30 g, 2	QASHQADARYO DORI-DARMON, JSC,
		g N25	Uzbekistan
2.	VALERIAN RHIZOME WITH	Medicinal plant raw material 30 and	Asel,PE, Uzbekistan
2.	ROOTS	50 g	riself E, Ozokistan
3.	MELISSA MEDICINAL HERB	Medicinal plant raw material 25, 30,	ZamonaRano, LLC,Uzbekistan
٥.	WIELISSA WIEDICHNAL HERB	40, 50, 100g	Zamonakano, ELC, Ozoekistan
4	MOTHERWORTHER	-	A LDE II L
4.	MOTHERWORT HERB	Medicinal plant raw material 30, 50 g	Asel, PE, Uzbekistan
_	1.0000000000000000000000000000000000000		
5.	MOTHERWORT HERB	Medicinal plant raw material 2 g	So'qoqgilosi, FH, Uzbekistan
		N15, N20, N25	
6.	MOTHERWORT HERB	Medicinal plant raw material 30, 50 g	SPESIALFORESTRY after the name of
			AbuAliIbnSino, PO "Shifobahsh",
			Uzbekistan
7.	MOTHERWORT HERB	Medicinal plant raw material 30, 50,	GERBOFARM, PE, Uzbekistan
		100 g	

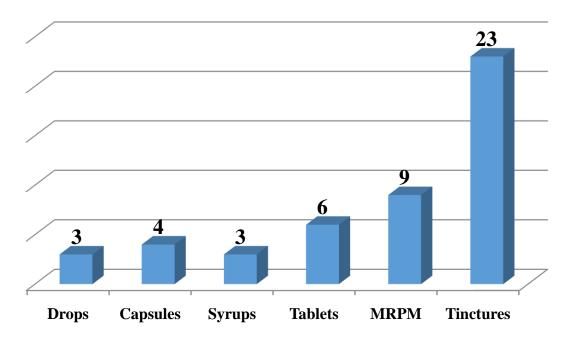
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8.	RANOCOLLECTION	Medicinal plant raw material 20, 30,	ZamonaRano, LLC, Uzbekistan
		40, 50, 100 g	
9.	FLEGMEN SEDATIVE	Medicinal plant raw material 30,50	SORB TEH, LLC, Uzbekistan
	COLLECTION	g,1 ,1,5r N20, N25	
SYI	RUPS		,
1.	PALORA®	Syrup 694,444 mg/5 ml 100 ml	manufactered: Nobel AlmatyPharmaceutical
			factory, JSC, Kazakhstan Pharmaceutical
			factory, JSC, Kazakhstan. packed: Nobel-
			Pharmsanoat, FE, Uzbekistan
2.	FITOPASSIT-IS	Syrup 50 ml, 90 ml (flask)	O´zkimyofarm, JSCafter the name ofS.K.
			Islambekova, Uzbekistan
3.			Uzbek Research Institute of Chemistry and
	PROPASSIT		Pharmaceutics (UzKFITI)
		Syrup 50 ml, 90 ml (flask)	forProfiPharmServis, LLC, Uzbekistan

The Table 2 shows the analysis of assortment of SMs of domestic production,registered in the State Register of the Republic of Uzbekistan of 2019,noting that 47 medicines were registered by domestic producers, including: 28 medicines of liquid dosage forms (tinctures, drops, solutions and syrups), 10 medicines of solid dosage forms (capsules, dry extract and tablets) and 9 medicines presented by medicinal plant raw materials. Fig.1 shows the proportionality of SMs produced domestically in different dosage forms.

#### **Medicines of domestic producers**



**Figure 1.** Quantitative proportionality of sedative medicines of domestic production produced in different dosage forms

The results of the research showed the presence of solid and liquid dosage forms in the assortment of SMs of domestic production, but the dominant amount of medicines is produced in liquid dosage forms. Tinctures are predominant among them, the second place is engaged by water extracts from medicinal raw materials, then syrups and drops for oral use are presented.

Thus, it can be concluded that the pharmaceutical market of the Republic of Uzbekistan offers the target segment of consumers a significant assortment of SMs of domestic production.

Further, the purpose of our research work was to study the assortment composition of SMs produced by CIS countries registered in the Republic of Uzbekistan.

Table 3. shows sedatives produced by the CIS countries, registered in the State Register of the Republic of Uzbekistan for 2019 (No. 23).

Table 3 SMs produced by the CIS countries, registered in the Republic of Uzbekistan

№	Name of the medicine	Dosage form	Manufacturer, country
Solu	itions and Drops		
1.	BARBOVAL®	Oral drops 25 ml	Pharmac, PJSC, Ukraine
2.	CORVALOL®	Oral drops 25 ml	Pharmac, PJSC, Ukraine
3.	SEDAVIT	Oral solution 100 and 200 ml	Galichpharm, PJSC, Ukraine
4.	SEDATIVE DROPS	Drops for oral use 50 ml	Borisov Factory of Medical Products, JSC, Belarus
5.	FITOSED®	Drops 25 ml	Tbilisi Pharmaceutical Factory, LLC, Georgia
6	CORVALOL	Drops for oral use	Usolye-Siberian Chemical Pharmaceutical Plant,
		25 ml (drip flasks)	JSC Russia
Tab	lets		
1.	BROMCAMPHOR	Tablets 250 mg N30	IrbitCFF, JSC, Russia
2.	VALERIAN-BELMED	Coated tablets 200 mg N10, N20, N30, N50	Belmedmedicines, RUE, Belarus
3.	VALERIAN EXTRACT	Coated tablets 20 mg N25, N50	Borisov Factory of Medical Products, JSC, Belarus
4.	VALERIAN EXTRACT	Coated tablets 20 mg N10, N50	Dalchempharm, JSC, Russia
5.	VALERIAN EXTRACT	Coated tablets 20 mg N10, N50	Pharmstandard-Tomskchemfarm, JSC, Russia
6.	CORVAL - G	Tablets N50	GM PharmaceuticalsLtd, Georgia
7.	CORVALOL®	Tablets N10, N30, N50	Pharmac, PJSC, Ukraine
8.	CORVALTAB	Tablets N20	Pharma Start, LLC Ukraine
9.	KRATAL FORKIDS	Coated tablets N20	Borshchagovsky CFF, PJSC, NPC, Ukraine
10.	KRATAL	Tablets N20	Borshchagovsky CFF, PJSC, NPC, Ukraine
11.	SEDAVIT	Tablets N20	Kievmedpreparat,PJSC, Ukraine

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12.	USPOKOY	Homeopathic tablets N20, N40	MateriaMedicaHolding,SPC, LLCRussia
13.	KORVALTABEXTRA	Coated tablets N10 (1x10), N20	Pharma Start, LLC
		(2x10) (blisters)	Ukraine
14.	SEDISTRESS		Pharma Start, LLC
		Tablets N30 (3x10) (blisters)	Ukraine
Cap	osules		
1.	MENOVALEN	Capsules N20	Borshchagovsky CFF, PJSC, NPC, Ukraine
2.	RELAKSIL	Capsules N20	Kiev Vitamin Factory, Ukraine
3.	SOMNA - RITZ®	Capsules N10	GM Pharmaceuticals Ltd,PSP group, Georgia
	FORTE		
4.	SOMNA - RITZ®	Capsules N10, N30	GM Pharmaceuticals Ltd,PSP group, Georgia
5.	TRIVALUMEN	Capsules N20	Borshchagovsky CFF, PJSC, NPC, Ukraine
6.	FITOSED	Capsules N20	Red Star, CFF, PJSC, Ukraine
Syr	ups		
1.	PALORA®	Syrup 100 ml	Nobel Almaty Pharmaceutical Factory, JSC,
			Kazakhstan

As it is seen from the Table 3, the analysis of the SMs assortment of CIS countries, registered in the State Register of the Republic of Uzbekistan in 2019, shows that the producers of CIS countries registered 27 medicines, including 7 items in liquid dosage forms (drops, solution and syrup), 20 items in solid dosage forms (tablets and capsules).

Figure 2 shows the quantitative proportionality of SMs of CIS countries production, manufactured in different dosage forms.

**Sedative medicines of CIS countries** 

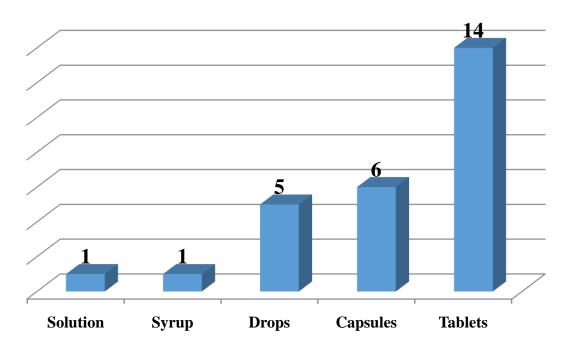


Figure 2. Quantitative proportionality of sedative medicines of CIS countries production, manufactured in different dosage forms

The Figure 2 shows thatamong SMs, manufactured by CIS countries in various dosage forms, the solid dosage forms (tablets and capsules) took the predominantplace.

Registered sedative medicines of foreign countries were also researched for a deeper and more comprehensive analysis of the SMs assortment.

The Table 4. shows SMs of foreign countries, registered in the State Register of the Republic of Uzbekistan for 2019 (No. 23).

Table 4. SMs of foreign countries registeredin the Republic of Uzbekistan

№	Name of Medicine	Dosage form	Manufacturer, country	
Syru				
1.	ALLEVA	Syrup 150 ml	RotapharmIlaclariLimitedSirketi, Turkey produced: FarmamagAmbalajSanayiveTicaretA.S., Turkey	
2.	ALORA®	Syrup100 ml	NobelllacSanayiiveTicaret A.S., Турцияргоduced: NobelfarmallacSanayiiveTicaret A.S., Turkey	
3.	BIOPASSIT	Syrup 100 ml	BioMedicarePvt. Ltd., Indiaproduced: MultaniPharmaceuticalsLtd, India	
4.	RELAXSHREY	Syrup 100 ml	ShreyNutraceutical& Herbals PVT., LTD, Индия	
5.	PALORA®	Syrup 100 ml (flask)	Nobel IlacSanayiiveTicaret A.S. Turkey	
Tabl	Tablets			
1.	ARDEYSEDON®	Coated tablets N20 , N50	ArdeypharmGmbH, Germany	

	NAHT		
2.	VALEVIT	Coated tabletsN20	PharmazeutischeFabrikMontavitGes.m.b.H., Austria
3.	VALERINOVKA	Film coated tablets N60	Virgo UAP Pharma Pvt. Ltd. India produced for: ShreyNutraceuticals& Herbals Pvt. Ltd, India
4.	DEPRIM®	Film coated tablets 60 mg	Lekd.d., Slovenia
5.	DORMIKIND	Homeopathic tablets N150	Deutsche Homoeopathie-Union DHU-Arzneimittel GmbH & Co.KG, Germany
6.	LOTOSONIC	Coated tabletsN10; N20	Danapha Pharmaceutical Joint Stock Company, Vietnam
7.	PERSEN® DAY/PERSEN® NIGHT	Coated tabletsN40	Lekd.d., Slovenia
8.	SIMPATIL	Coated tabletsN40	LaboratoireInnotech International, France produced: InnotheraChouzy, France
9.	NORMODOKS	Enteric coated tablets N30 (3x10), N100 (10x10) (blisters)	Unicure (India) Pvt. Ltd India
10.	NEUREXAN	Tablets N25, N50 (polypropylene containers)	BiologischeHeilmittel Heel GmbH Germany
Caps	ules		-
1.	BODRIN	Capsules N30	Dr.SertusIlacSanayiveTicaretLimitedSirketi, Turkey produced: AdipharmLtd, Bulgaria
2.	VALIAN-X	CapsulesN30,N50, N100	Mega Lifesciences (Australia) Pty. Ltd, Australia produced: Mega Lifesciences Public Company Limited, Tailand
3.	VAMELAN	CapsulesN30	WorldMedicine, England produced: P.P.F. Hasco-LekS.A., Poland
4.	NERVOMIX FORTE	CapsulesN20	Adamed Consumer Healthcare S.A., Poland produced: Pharmaceutical Works Polfa in Pabianice Joint Stock Company, Poland
5.	RELAXSHREY	CapsulesN30	ShreyNutraceutical& Herbals PVT., LTD, India
6.	STRESSI	CapsulesN20	AvantikaMedex PVT. LTD, India
7.	CENTRAL-B	CapsulesN15, N30, N45	RotapharmLimited, Great Britain, produced: LaboratoriaQualipharN.V./S.A., Belgium
8.	CENTRAL-B	CapsulesN15, N30, N45	Rotapharm, Great Britain, produced: AdipharmLtd, Bulgaria
9.	PERSEN® DAY/PERSEN®	CapsulesN20	Lekd.d., Sloveniz

	NIGHT		
10.	DOCTORSON	CapsulesN20 (2x10)	NabrosPharma Pvt. Ltd
10.		(blisters)	India
1.1	SONLIFE	CapsulesN30 (3x10)	Shree Life Sciences Pvt. Ltd
11.		(blisters)	India

As it is seen from the Table 4, the analysis of the assortment of SMs of foreign countries registered in the State Register of the Republic of Uzbekistan of 2019, showed that the producers of foreign countries registered 26 medicines.

Figure 3 shows the quantitative proportionality of SMs produced by foreign countries manufactured in different dosage forms.

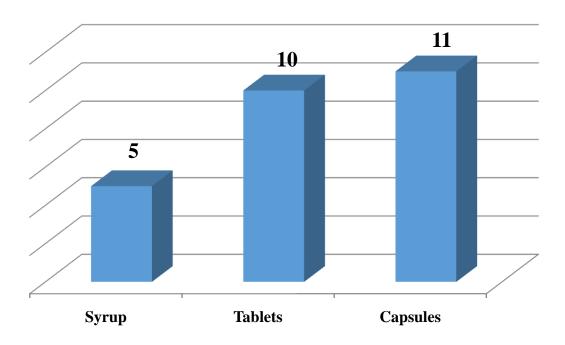


Fig. 3. Quantitative proportionality of sedative medicines of foreign countries produced in different dosage forms

The Figure 3. shows the quantitative proportionality of registered SMs of foreign countries in different dosage forms. 21 items, registered among them are in solid dosage forms (tablets and capsules) and 5 are in liquid dosage forms (syrups).

Table 5. Analogues of foreign medicines produced in the Republic of Uzbekistan

№	SMsof CIS countries production		SMs of domestic production	
	SMs	Manufacturer, country	SMs	Manufacturer, country
1.	Palora®	Nobel Almaty	Palora®	produced: Nobel Almaty

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	Syrup 100 ml	Pharmaceutical Factory,	Syrup 100 ml	Pharmaceutical Factory,
		JSC, Kazakhstan		JSC, Kazakhstan
				packed: Nobel-
				Pharmsanoat, FE,
				Uzbekistan
2.	CORVALOL®	Pharmac, PJSC, Ukraine	CORVALOL – NGP	Neogalenpharm, FE, LLC.
	Drops for oral use		Drops for oral use	Uzbekistan
	25 ml		25,30 ml	

As it is seen from the Table 5, 2 medications similar to those of the CIS countries are also produced in the Republic of Uzbekistan.

In accordance with the Resolution of the President of the Republic of Uzbekistan "On measures of creation offavorable conditions for the accelerated development of the pharmaceutical industry of the Republic" for No. PP-2911 dated April 20, 2017 (Collection of Legislation of the Republic of Uzbekistan, 2017, No. 18, p. 315) in order to expand the domestic market with domestic medicines on the base of local raw materials, providing favorable conditions for the comprehensive and accelerated development of the pharmaceutical industry, it is planned to create a new medication based on the "Phlegmen" sedative collection, which was developed by the associates of the Tashkent Pharmaceutical Institute, and which successfully passed clinical tests and is produced in the Republic of Uzbekistan by SORB-TEH LLC, Uzbekistan. The new medicine form includes medicinal plants, with a sufficiently secured raw material base on the territory of our republic [7]. Particularly, the syrup includes Phlomisregeli, Turkistan Leonurusturkestanicus, Glycyrrhiza glabra, peppermint leaves (Mentha piperita, L.) and potassium bromide [8]. The results of the content analysis of SMs assortment showed its insufficient quantity in liquid forms, particularly in the form of syrups, the effect of which is more effective than the tablets or capsules [9].

## **III.** Conclusion

The data study of the "State Register of Medicines, medical products and medical equipment allowed for application in medical practice of the Republic of Uzbekistan" for 2015-2019 № 19-23) showed that the share of CIS countries for SMs' production varies from 23 to 27 items, the share of foreign SMs varies from 19 to 26, the dynamics of which practically did not change during 2015-2019. In the same period, the share of domestic producers increased from 29 to 47 items.

From 2015 to 2019 SMs assortment increased from 73 to 100 positions at the expense of medicines of domestic manufacturers.

Analysis of SMs market showed that in the pharmaceutical production of Uzbekistan sedative medicines of plant origin are represented by such dosage forms as tinctures, medicinal plant raw materials, tablets, syrups, drops and capsules. The total number of registered sedatives in 2019 was 100 items. The share of liquid dosage forms is 40 items. Considering that fact that the share of SMsin a syrup form makes a small quantity: 3 medications (from the total quantity of domestic production), 1 medication(from the total quantity of production of CIS countries) and 5 medications (from the total quantity of foreign medicines), we consider it advisable to create a new SM of plant origin in themedicinal form –a syrup.

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