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COMPREHENSIVE ANALYSIS OF THE MEDICINES' ASSORTMENT FOR THE SYMPTOMATIC TREATMENT OF STRESS

Introduction. In Ukraine, the problem of stress has become extremely relevant due to the complex social, economic and psychological realities caused by ongoing military conflict and its long-term consequences. One of the most common approaches to the prevention and symptomatic management of stress-related conditions is the use of sedatives, hypnotics or nootropics, particularly herbal origin with milder effect and a relatively low incidence of adverse reactions.

The Aim of the Study is to analyze the Ukrainian pharmaceutical market of OTC-medicines used for the symptomatic management of stress.

Research Methods. The study utilized data from State register of medicines of Ukraine, the Pharmacist's Protocol "Symptomatic treatment of stress", the Compendium online, the resources "Apteki.ua", "Tabletki.ua".

Results and Discussion. The analysis shows that as of September 1, 2025, 85 trade names of over-the-counter medicines recommended for the symptomatic treatment of stress disorders were registered on the pharmaceutical market of Ukraine. Structural analysis according to the ATC classification reveals that 85.8 % of the range belong to the subgroup N05 CM "Hypnotic and sedatives". Analysis of the market segment by production characteristic indicates that 78 % of the range is domestic and 22 % is foreign-made. It was established that solids prevail by type of dosage form: film-coated tablets (21 %), tablets (11 %), sublingual tablets (6 %), capsules (15 %), and herbal raw materials in packs and filter bags (9 %). The liquid dosage forms include tinctures (21 %), oral solutions (10 %), and oral drops (6 %). It was determined that the range of drugs is dominated by combined preparations of natural origin – 85.8 % based on dry, thick or liquid extracts of St. John's wort herb, valerian root, motherwort herb, passionflower herb, lemon balm herb.

Conclusions. The obtained data can be used to optimize pharmaceutical care, improve rational drug selection, and support evidence-based decision-making in the healthcare of stress management.

KEY WORDS: stress disorders; over-the-counter medicines; ATC classification; dosage forms; pharmaceutical market.

INTRODUCTION. In Ukraine, the problem of stress has become particularly relevant, as it is caused by the complex realities of modern life, including the full-scale war and its consequences [1–3]. Stress is a state of physiological or psychological strain caused by adverse mental, emotional, external or internal factors that are directed at disrupting the functions of the body and which the organism naturally attempts to avoid [4]. The population of Ukraine has faced a serious problem of chronic stress that has emerged as a result of the ongoing military conflict. This situation has inevitably affected the perception of the environment, general well-being, and people's

health. Stress has radically changed people's everyday lives, destroyed normal routine and made it impossible, bringing instability and uncertainty, complexity, unpredictability, and insecurity. Prolonged exposure to stress lead to decreased cognitive function, exhaustion of physical resources, fatigue, and a negative impact on working capacity, as well as contribute to the development of severe mental and physical disorders [5; 6].

In the context of prolonged exposure to stress and its significant impact on public health in Ukraine, ensuring adequate access to safe, effective, and affordable medicines for stress management has become a priority for the healthcare system. Herbal medicines are widely used for the prevention and symptomatic treatment of stress-related disorders, as they

provide a complex therapeutic effect and minimal adverse reactions [4; 7]. Sedative medicines, particularly those of herbal origin, represent one of the most common pharmacological approaches used by the population for self-care and symptomatic relief of stress-related manifestations, including anxiety, sleep disorders, irritability, and emotional instability.

At the same time, the pharmaceutical market for sedative medicines is characterized by considerable diversity in terms of active substances, dosage forms, manufacturers, countries of origin, and price ranges [8]. Such variability may complicate the rational choice of medicines both for healthcare professionals and for patients.

The aim of the study is to conduct a comprehensive analysis of the pharmaceutical market of OTC-medicines used for the symptomatic management of stress.

RESEARCH METHODS. The objects of the study were the State register of medicines of Ukraine [9], the Pharmacist's Protocol during the provision of pharmaceutical care for the nosology "Symptomatic treatment of stress", in particular those containing herbal components [7], the directory of medicines Compendium online, the ATC-classification (group N 05 – psycholeptics, group N 06 – psychoanaleptics, group N 07 – other nervous system agents) [10; 11], online resources for searching medicines in Ukrainian such as "Apteki.ua" and "Tabletki.ua" [12; 13].

The study used the following methods: content analysis, marketing, mathematical-statistical, logical generalization, and graphical methods. The obtained data were systematized and presented in diagrams with explanations and conclusions.

According to the Pharmacist's Protocol "Symptomatic Management of Stress" [7], the list of over-the-counter (OTC) medicines includes agents affecting the nervous system (Glycine), anxiolytics (Temgicoluril), antidepressants (St. John's wort herb), and herbal hypnotic and sedative agents, including combination products (St. John's wort herb, Valerian root, Motherwort herb, Passionflower herb, Lemon balm herb). Therefore, in order to achieve the aim, data from the State Register of Medicines of Ukraine and the electronic directory Compendium regarding these groups of medicines were analyzed, and a structural analysis of their assortment was conducted according to the Anatomical Therapeutic Chemical (ATC) classification, country and

manufacturer, composition, dosage form and price policy.

According to the conducted analysis of the assortment of the Ukrainian market of medicines for the symptomatic management of stress, it was found that 85 trade names (TN) of medicines of both domestic and foreign production are registered (as of 01.09.2025). It was determined that they belong to different pharmacological groups according to the ATC classification (Table 1).

In order to systematically organize the available medicines and provides an evidence base for optimizing the list of medicines, supporting national pharmaceutical policy, and ensuring the rational use of medicinal products, it's necessary to analyze the assortment structure (Table 2) and determination of the share of each International Nonproprietary Name (INN). Determining the share of each INN makes it possible to identify the dominant and underrepresented active substances in the pharmaceutical market, to evaluate trends in the production and use of sedative and anxiolytic medicines and to assess the degree of diversification within the pharmaceutical segment. This is also essential for understanding whether the current assortment corresponds to the epidemiological needs of the population in conditions of prolonged stress exposure.

According to the obtained results, the largest share (85,8 %) in the structure of the assortment is occupied by herbal medicines of N05CM group "Hypnotic and sedatives", which indirectly reflects consumer demand for phytotherapeutic products, as well as the diversity of offers in the segment of sedative and hypnotic agents. The largest proportion of the studied assortment is occupied by medicines containing Lemon balm herb, accounting for 21 TN (24.7 %) of the total. A slightly smaller share is represented by medicines based on Valerian root, with 20 TN (23.5 %), indicating their high prevalence in the structure of sedative medicines. Preparations containing Motherwort herb rank third in frequency, comprising 14 TN (16.5 %). In addition, medicines containing St. John's wort herb appear in two ATC groups represented totaling 10 TN (11.7 %) of the assortment.

Synthetic or semi-synthetic substances are represented to a lesser extent. For instance, glycine (ATC code N07XX) and temgicoluril (N06BX21), are represented by 6 TN of each.

The analysis of the medicines by country of manufacturer indicates that domestically produced medicines account for 78 % of the

Table 1 – Analysis of the nomenclature of herbal medicines for management of stress in Ukraine

№	Trade name	Dosage form	Composition of active ingredients	Manufacture	Country
		N05CM "Hypnotic and Sedatives (Lemon Balm Herb, <i>Melissa officinalis</i> L.)"			
	LEMON BALM HERB	50 g of herb in packs with an inner bag; 1.5 g in a filter bag; 20 filter bags in a cardboard pack	1 pack contains lemon balm herb (<i>Melissae herba</i>) – 50 g; 1 filter bag contains lemon balm herb (<i>Melissae herba</i>) – 1.5 g	PrJSC Pharmaceutical Factory "Viola"	Ukraine
	LEMON BALM HERB	50 g of herb in packs with an inner bag, 1.5 g in a filter bag; 20 filter bags in a pack; 1.5 g in a filter bag; 20 filter bags in a pack with an inner bag	1 pack contains lemon balm herb (<i>Melissae herba</i>) – 50 g; 1 filter bag contains lemon balm herb (<i>Melissae herba</i>) – 1.5 g	PJSC "Liktravy"	Ukraine
	QUIET® CALMING	film-coated tablets, 10 tablets per blister; 2 or 4 blisters per pack	1 tablet contains: dry hydroalcoholic extract of valerian (<i>Valeriana officinalis</i> L.) (DER: (3–6:1), extractant: ethanol 70 %) – 125 mg; dry extract of lemon balm leaves (<i>Melissa officinalis</i> L.) (DER: (4–6:1), extractant: methanol 30 %) – 112.5 mg; dry extract of passionflower herb (<i>Passiflora incarnata</i> L.) (DER: (3–6:1), extractant: ethanol 70 %) – 80 mg	JSC "Farmak"	Ukraine
	CARDIOSED	oral drops; 25 ml, 40 ml, or 50 ml in a bottle; 1 bottle in a cardboard pack	1 ml of tincture (1:5–6) from a mixture of LRS: rhizomes with valerian roots (<i>Rhizomata cum radicibus Valerianae</i>), hawthorn fruits (<i>Crataegi fructus</i>), motherwort herb (<i>Herba Leonuri</i>), lemon balm herb (<i>Herba Melissa</i>) (2/1/2/2) (extractant – ethanol 70 % v/v)	JSC "Lubnypharm"	Ukraine
	CARDIOSED	oral drops, 25 ml, 40 ml, or 50 ml in a bottle; 1 bottle in a cardboard pack	1 ml of tincture (1:5–6) from a mixture of LRS: rhizomes with valerian roots (<i>Rhizomata cum radicibus Valerianae</i>), hawthorn fruits (<i>Crataegi fructus</i>), motherwort herb (<i>Herba Leonuri</i>), lemon balm herb (<i>Herba Melissa</i>) (2/1/2/2) (extractant – ethanol 70 % v/v)	JSC "Lubnypharm"	Ukraine
	RELAXIL	hard capsules; 10 capsules in a blister; 2 blisters in a pack.	1 capsule contains valerian 0.8 % dry aqueous-alcoholic extract 125 mg, peppermint dry extract 25 mg, lemon balm dry extract 25 mg.	JSC "Kyiv vitamin factory"	Ukraine
	DORMIPLANT	film-coated tablets, 25 tablets in a blister; 1 or 2 blisters in a cardboard box	1 film-coated tablet contains 160 mg of dry extract of valerian root (<i>Valeriana officinalis</i>) (3–6:1) [extractant: ethanol 62 % (v/v)]; 80 mg of dry extract of lemon balm leaves (<i>Melissa officinalis</i>) (4–6:1) [extractant: ethanol 30 % (v/v)]	Dr. Wilmar Schwabe GmbH & Co. KG	Germany
	VAMELAN	soft capsules, 15 capsules in a blister; 2 blisters in a cardboard box	1 soft capsule contains: dry valerian (root) hydro-ethanolic extract (<i>Valeriana officinalis</i> L., radix, extractum hydroalcoholic siccum) (3–5:1) (extractant – ethanol 60 % [v/v]) – 125.0 mg; dry lemon balm leaf extract (<i>Melissa officinalis</i> L., folium, extractum siccum) (4–6:1) (extractant – ethanol 50 % [v/v]) – 25.0 mg; dry peppermint leaf extract (<i>Mentha piperita</i> L., folium, extractum siccum) (3–6:1) (extractant – ethanol 40 % [v/v]) – 25.0 mg	P.P.F. HASKO-LEK S.A.	Poland
	SEDASEN	capsules, 40 capsules in a plastic container; 1 container in a cardboard pack	1 capsule contains 50 mg of valerian dry extract (<i>Valeriana officinalis</i> L.) (3–8:1) (extractant – ethanol 80 %); 25 mg of peppermint dry extract (<i>Mentha piperita</i> L.) (4–6:1) (extractant – ethanol 50 %); 25 mg of lemon balm (<i>Melissa officinalis</i> L.) dry extract (6–8:1) (extractant – ethanol 70 %)	Joint Ukrainian-Spanish Enterprise "Sperco Ukraine"	Ukraine

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Continue of Table 1

№	Trade name	Dosage form	Composition of active ingredients	Manufacture	Country
	PERSEN® FORTE	hard capsules, 10 capsules in a blister; 2 blisters in a cardboard box	1 capsule contains valerian (root) hydro-ethanolic dry extract (Valeriana officinalis L., radix, extractum hydroalcoholic siccum) (4–7:1) (extractant – ethanol 70 % (v/v)) – 87.5 mg; lemon balm leaf extract (Melissa officinalis L., folium, extractum siccum) (3–6:1) (extractant – ethanol 50 % (v/v)) – 17.5 mg; peppermint leaf extract (Mentha piperita L., folium, extractum siccum) (3–6:1) (extractant – ethanol 40 % (v/v)) – 17.5 mg	Adipharm EAD	Bulgaria
	KARVELIS	oral drops, solution 30 ml, 50 ml, 100 ml in a bottle closed with a dropper; 1 bottle in a cardboard pack	10 ml of the preparation contain: extract from a mixture of hawthorn leaves, flowers and fruits (Crataegi folii cum flore, fructus extractum) (1:1.6–2.2), extractant: ethanol 50 % (v/v) – 7.125 ml; extract of dog nettle herb (Leonuri herbae extractum) (1:1.7–2.2), extractant: ethanol 40 % (v/v) – 1.0 ml; extract of lemon balm leaves (Melissae herbae extractum) (1:1.6–2.1), extractant: ethanol 60 % (v/v) – 1.0 ml; extract of valerian root (Valerianae radix extractum) (1:1.6–2.1), extractant: ethanol 60 % (v/v) – 0.5 ml	Dr. Gustav Klein GmbH & Co. KG	Germany
	FITOSSED®	capsules, 10 capsules in a blister; 2 blisters in a cardboard pack	1 capsule contains a mixture of medicinal plant raw materials "Phytosed®": crataegi fructus (hawthorn fruit) – 30 mg, leonuri cardiaceae herba (dog nettle herb) – 60 mg, lupuli strobili (hop cones) – 60 mg, aveni fructus (oat fruit) – 75 mg, melissae officinalis herba (melissa herb) – 45 mg, coriandri fructus (coriander fruit) – 15 mg, melliloti herba (sweet clover herb) – 15 mg	PJSC "Chervona Zirka"	Ukraine
	FITOSSED®	tincture, 100 ml in a glass or polymer bottle; 1 bottle in a pack; 100 ml in a glass jar; 1 jar in a pack	100 ml of the preparation contain tinctures from a mixture of medicinal plant raw materials "Phytosed®" (1:10) (extractant – ethanol 40 %): Crataegi fructus (hawthorn fruits) – 1 g; Leonuri cardiaceae herba (dog nettle herb) – 2 g; Lupuli strobili (hop cones) – 2 g; Aveni fructus (oat fruits) – 2.5 g; Melissae officinalis herba (melissa herb) – 1.5 g; Coriandri fructus (coriander fruits) – 0.5 g; Melliloti herba (melissa herb) – 0.5 g	PJSC "Chervona Zirka"	Ukraine
	FITOSSED®	capsules in bulk № 1200 (1 200 capsules in containers); № 3750 (10 × 375) (10 capsules in a blister; 375 blisters in a box)	1 capsule contains a mixture of medicinal plant raw materials "Phytosed®": crataegi fructus (hawthorn fruit) – 30 mg, leonuri cardiaceae herba (dog nettle herb) – 60 mg, lupuli strobili (hop cones) – 60 mg, aveni fructus (oat fruit) – 75 mg, melissae officinalis herba (melissa herb) – 45 mg, coriandri fructus (coriander fruit) – 15 mg, melliloti herba (sweet clover herb) – 15 mg	PJSC "Chervona Zirka"	Ukraine
	BELISA	capsules; 10 capsules in a blister, 3 or 9 blisters in a pack	1 capsule contains: Dry extract of passionflower obtained from water-alcohol extract (1:3) (extractant – ethanol 40 %) from a mixture of: passionflower herb (Passiflorae herba) 100 mg; linden flowers (Tiliae flores) 100 mg; oregano herb (Origanum vulgare herba) 66.7 mg; sage leaves (Salviae officinalis folia) 33.3 mg; lemon balm herb (Melissae herba) 33.3 mg, calculated on 5 % moisture (4.3–5.3 % maltodextrin, 4.3–5.3 % colloidal anhydrous silicon dioxide) – 51.2 mg	LLC "DKP "Pharmaceutical Factory"	Ukraine

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№	Trade name	Dosage form	Composition of active ingredients	Manufacture	Country
	BELISA	oral drops 25 ml or 40 ml in a bottle with a dropper stopper; 1 bottle in a pack	1 ml of the drug contains a water-alcohol extract (1:3) (extractant – ethanol 40 %) from a mixture of: passionflower herb (Passiflorae herba) 100 mg; linden flowers (Tiliae flores) 100 mg; oregano herb (Origanum herba) 66.7 mg; sage leaves (Salviae officinalis folia) 33.3 mg; lemon balm herb (Melissae herba) 33.3 mg	PJSC "Chervona Zirka"	Ukraine
	SEDASEN FORTE	capsules, 20 capsules in a plastic container; 1 container in a cardboard pack	1 capsule contains valerian dry extract (Valeriana officinalis L.) (3–8:1) (extractant – ethanol 80 %) 125 mg, peppermint dry extract (Mentha piperita L.) (4–6:1) (extractant – ethanol 50 %) 25 mg, lemon balm (lemon mint) dry extract (Melissa officinalis L.) (6–8:1) (extractant – ethanol 70 %) 25 mg	Joint Ukrainian-Spanish Enterprise "Sperco Ukraine"	Ukraine
	PERSEN®	film-coated tablets, 10 tablets in a blister; 4 blisters in a cardboard box	1 tablet contains dry valerian (root) hydro-ethanolic extract (Valeriana officinalis L., radix, extractum hydroalcoholicum) (4–7:1) (extractant – ethanol 70 % (v/v)) – 35 mg; dry lemon balm leaf extract (Melissa officinalis L., folium, extractum siccum) (3–6:1) (extractant – ethanol 50 % (v/v)) – 17.5 mg; dry peppermint leaf extract (Mentha piperita L., folium, extractum siccum) (3–6:1) (extractant – ethanol 40 % (v/v)) – 17.5 mg	Sopharma AD	Bulgaria
	NOVO-PASSIT	oral solution 100 ml in a bottle; 1 bottle with a measuring cap in a box; 5 ml in a sachet; 30 sachets in a box	1 ml of solution contains: extract for Novo-Passit liquid (Hyperici herba (St. John's wort herb), Passiflorae herba (passionflower herb), Valerianae radix (valerian root), Crataegi folium cum flore (hawthorn leaves and flowers), Lupuli flos (hop cones), Melissa herba (melissa herb), Sambusi flos (elderberry flowers)) (1:13, extractant – water) 0.0775 g, guaifenesin 0.04 g	Teva Czech Industries s.r.o.	Czech Republic
	NOVO-PASSIT	film-coated tablets, 10 tablets in a blister; 1 or 3 blisters in a box	1 tablet contains: dry extract of Novo-Passit (elderflowers (Sambusi flos), hawthorn leaves and flowers (Crataegi folium cum flore), St. John's wort herb (Hyperici herba), lemon balm herb (Melissae herba), passionflower herb (Passiflorae herba), hop cones (Lupuli flos), valerian root (Valerianae radix)) 157.5 mg; guaifenesin 200 mg	Teva Czech Industries s.r.o.	Czech Republic
	QUIET®	oral solution; 100 ml in a bottle; 1 bottle with a dosing cup/dosing cup in a pack	1 ml of solution contains: complex sedative extract, thick from a mixture of hawthorn inflorescences (Crataegi folium cum flore), hop cones (Lupuli flos), St. John's wort herb (Hyperici herba), lemon balm leaves (Melissae folium), passionflower herb (Passiflorae herba), black elderberry flowers (Sambuci flos), valerian roots (Valerianae radix) (2–4:1), extractant 30 % ethanol – 77.5 mg; guaifenesin in terms of 100 % substance – 40 mg	JSC "Farmak"	Ukraine
			N05CM "Hypnotic and Sedatives (Passionflower Herb, <i>Passiflora incarnata</i> L.)"		
	SEDISTRESS	tablets, 10 tablets in a blister; 1, 3 and 6 blisters in a cardboard pack	1 tablet contains: dry passionflower extract (Passiflorae herba) – 300 mg; ethyl ester of alpha-bromisovaleric acid 10.2 mg	LLC "Pharma Start"	Ukraine

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№	Trade name	Dosage form	Composition of active ingredients	Manufacture	Country
	NOVO-PASSIT	oral solution 100 ml in a bottle; 1 bottle with a measuring cap in a box; 5 ml in a sachet; 30 sachets in a box	1 ml of solution contains: extract for Novo-Passit liquid (Hyperici herba (St. John's wort herb), Passiflorae herba (passionflower herb), Valerianae radix (valerian root), Crataegi folium cum flore (hawthorn leaves and flowers), Lupuli flos (hop cones), Melissa herba (melissa herb), Sambusi flos (elderberry flowers)) (1:13, extractant – water) 0.0775 g, guaifenesin 0.04 g	Teva Czech Industries s.r.o.	Czech Republic
	SEDISTRESS	tablets, 10 tablets in a blister; 1, 3 and 6 blisters in a cardboard pack.	1 tablet contains: dry passionflower extract (Passiflorae herba) – 300 mg; ethyl ester of alpha-bromisovaleric acid 10.2 mg	LLC "Pharma Start"	Ukraine
	BIOSON	film-coated tablets, 10 tablets in a blister; 1, 2, 3 or 10 blisters in a cardboard pack.	1 tablet contains 300 mg of dry passionflower extract (Passiflorae herba), 3.75 mg of doxylamine hydrogen succinate	LLC "Pharma Start"	Ukraine
	NOVO-PASSIT	film-coated tablets, 10 tablets in a blister; 1 or 3 blisters in a box	1 tablet contains: dry extract of Novo-Passit (elderflowers (Sambusi flos), hawthorn leaves and flowers (Crataegi folium cum flore), St. John's wort herb (Hyperici herba), lemon balm herb (Melissae herba), passionflower herb (Passiflorae herba), hop cones (Lupuli flos), valerian root (Valerianae radix)) 157.5 mg; guaifenesin 200 mg	Teva Czech Industries s.r.o.	Czech Republic
	QUIET®	oral solution; 100 ml in a bottle; 1 bottle with a dosing cup/dosing cup in a pack	1 ml of solution contains: complex sedative extract, thick from a mixture of hawthorn inflorescences (Crataegi folium cum flore), hop cones (Lupuli flos), St. John's wort herb (Hyperici herba), lemon balm leaves (Melissae folium), passionflower herb (Passiflorae herba), black elderberry flowers (Sambuci flos), valerian roots (Valerianae radix) (2–4:1), extractant 30 % ethanol – 77.5 mg; guaifenesin in terms of 100 % substance – 40 mg	JSC "Farmak"	Ukraine
	BELISA	capsules; 10 capsules in a blister, 3 or 9 blisters in a pack	1 capsule contains: Dry extract of passionflower obtained from water-alcohol extract (1:3) (extractant – ethanol 40 %) from a mixture of: passionflower herb (Passiflorae herba) 100 mg; linden flowers (Tiliae flos) 100 mg; oregano herb (Origanum vulgare herba) 66.7 mg; sage leaves (Salviae officinalis folia) 33.3 mg; lemon balm herb (Melissae herba) 33.3 mg, calculated on 5 % moisture (4.3–5.3 % maltodextrin, 4.3–5.3 % colloidal anhydrous silicon dioxide) – 51.2 mg	LLC "DKP "Pharmaceutical Factory""	Ukraine
	BELISA	oral drops 25 ml or 40 ml in a bottle with a dropper stopper; 1 bottle in a pack	1 ml of the drug contains a water-alcohol extract (1:3) (extractant – ethanol 40 %) from a mixture of: passionflower herb (Passiflorae herba) 100 mg; linden flowers (Tiliae flos) 100 mg; oregano herb (Origanum vulgare herba) 66.7 mg; sage leaves (Salviae officinalis folia) 33.3 mg; oregano herb (Origanum vulgare herba) 66.7 mg; sage leaves (Salviae officinalis folia) 33.3 mg; lemon balm herb (Melissae herba) 33.3 mg	LLC "DKP "Pharmaceutical Factory""	Ukraine
	MOTHERWORT TINCTURE	tincture 25 ml in glass dropper bottles or polymer bottles; 25 ml in a glass dropper bottle or polymer bottle; 1 glass dropper bottle or polymer bottle in a cardboard pack	N05CM "Hypnotic and Sedatives (Motherwort Herb, Leonurus cardiaca L.)" 1 bottle contains tincture of motherwort herb (tinctura herbae Leonuri) (1:5) (extractant – ethanol 70 %) 25 ml		
				LLC "Ternopharm"	Ukraine

№	Trade name	Dosage form	Composition of active ingredients	Manufacture	Country
	MOTHERWORT TINCTURE	tincture for internal use, 25 ml or 100 ml in glass bottles, 25 ml or 100 ml in a glass bottle; 1 bottle in a cardboard pack	1 bottle contains tincture of motherwort herb (Leonuri cardiacaе herba) (1:5) (extractant – ethanol 70 % (v/v)) 25 ml	JSC "Lubnypharm"	Ukraine
	MOTHERWORT TINCTURE	tincture of 25 ml in bottles	1 bottle contains tincture of motherwort herb (Leonuri herba) (1:5) (extractant – ethanol 70 %) 25 ml	PJSC "Fitopharm"	Ukraine
	MOTHERWORT TINCTURE	tincture 25 ml in a bottle; 1 bottle per pack; 25 ml or 50 ml in bottles; 25 ml in bottles sealed with dropper caps; 25 ml in bottles sealed with dropper caps; 1 bottle per pack; 50 ml in polymer bottles sealed with caps with first-opening control; 50 ml in polymer bottles sealed with caps with first-opening control; 1 bottle per pack; 50 ml in polymer bottles sealed with dropper caps and caps; 50 ml in polymer bottle sealed with dropper caps and cap; 1 bottle per pack	1 bottle contains tincture of motherwort herb (Tinctura Leonuri) (1:5) (extractant – ethanol 70 %) – 25 ml or 50 ml	PrJSC Pharmaceutical Factory "Viola"	Ukraine
	MOTHERWORT TINCTURE	tincture for oral use, 25 ml in bottles; 25 ml in a bottle; 1 bottle in a pack	tincture of dog nettle herb (Leonuri cardiacaе herba) (1:5) (extractant – ethanol 70 %)	LLC "DKP "Pharmaceutical Factory""	Ukraine
	MOTHERWORT TABLETS	14 mg tablets, 10 tablets in blisters; 10 tablets in a blister; 4 blisters in a pack	1 tablet contains: motherwort herb thick extract (Leonuri cardiaca herba) (1:0.15) (extractant – ethanol 70.0 % (v/v)), calculated as the content of the sum of flavonoids 0.4 % and dry matter – 14 mg	JSC "Lubnypharm"	Ukraine
	MOTHERWORT TINCTURE	tincture in 25 ml, 40 ml, 50 ml or 100 ml bottles	1 bottle contains tincture of motherwort herb (Herba Leonuri) (1:5) (extractant – ethanol 70 %) 25 ml or 40 ml, or 50 ml, or 100 ml	PE "Kilaff"	Ukraine
	MOTHERWORT TINCTURE	tincture 25 ml in dropper bottles, 30 ml in bottles, 30 ml in a bottle; 1 bottle in a cardboard pack	1 bottle contains tincture of motherwort herb (Herbae Leonuri) (1:5) (extractant – ethanol 70 %) 25 ml or 30 ml	Subsidiary enterprise "Agrofirm PE "Yan""	Ukraine
	MOTHERWORT TINCTURE	tincture 25 ml in polymer bottles, 50 ml in glass bottles	1 bottle contains tincture of dog nettle herb (Leonuri cardiacaе herba) (1:5) (extractant – ethanol 70 %) 25 ml or 50 ml	Private Joint Stock Company "Biolik"	Ukraine
	MOTHERWORT -VISHPHA	tincture for oral use, 25 ml in bottles	tincture of stinging nettle herb (1:5) (extractant – ethanol 70 %)	LLC "DKP "Pharmaceutical Factory""	Ukraine

Continue of Table 1

№	Trade name	Dosage form	Composition of active ingredients	Manufacture	Country
	MOTHERWORT TINCTURE	herb, 50 g or 100 g in packs with inner bag; 1.5 g in a filter bag, 20 filter bags in a pack	1 pack contains motherwort herb (<i>Leonuri cardiaca</i> herba) – 50 g or 100 g; 1 filter pack contains motherwort herb (<i>Leonuri cardiaca</i> herba) – 1.5 g	PrJSC Pharmaceutical Factory "Viola"	Ukraine
	MOTHERWORT TINCTURE	herb 50 g, 100 g in packs with inner bag, 1.5 g in filter bag; 20 filter bags in a cardboard pack	1 pack contains 50 g or 100 g of motherwort herb; 1 filter bag contains 1.5 g of motherwort herb	JSC "Lubnypharm"	Ukraine
	MOTHERWORT TINCTURE	cut-pressed herb, 100 g each, in packs with an inner bag	1 pack contains motherwort herb (<i>Leonuri herba</i>) 100 g	PJSC "Liktravy"	Ukraine
	MOTHERWORT TINCTURE	herb, 50 g in packs with inner bag; 1.5 g or 2.0 g in a filter bag, 20 filter bags in a pack with inner bag; 1.5 g or 2.0 g in a filter bag, 20 filter bags in a pack	Motherwort herb (<i>Leonuri herba</i>).	PJSC "Liktravy"	Ukraine
		N05CM "Hypnotic and Sedatives (<i>Valerian Root, Valeriana officinalis</i> L.)"			
	VALERIAN FORTE	film-coated tablets, 40 mg, 10 tablets in a blister; 5 blisters in a pack	1 tablet contains valerian extract thick (<i>Valerianae extractum spissum</i>) 3.5:1 (extractant 40 % (v/v) ethanol) in terms of dry matter – 40 mg	PJSC "Kyivmedpreparat"	Ukraine
	VALERIAN EXTRACT ARTERIUM	film-coated tablets, 20 mg, 10 tablets in a blister, 5 blisters in a pack; 50 tablets in blisters	1 tablet contains valerian extract thick (<i>Valerianae extractum spissum</i>) extractant ethanol (40 %) calculated on dry matter 20 mg	PJSC "Galychpharm"	Ukraine
	NOXON	film-coated tablets, 450 mg, 10 tablets in a blister; 2 blisters in a pack	1 tablet contains valerian dry aqueous-alcoholic extract (<i>Valeriana officinalis</i> , L., radix), (4–8/1), extractant ethanol-water 30–70 % (v/v), calculated on the anhydrous substance – 450 mg	PJSC "Kyivmedpreparat"	Ukraine
	VALERIAN-VISHPHA	tincture for oral use, 25 ml in glass or polymer bottles	1 bottle contains tincture of valerian roots (<i>Valerianae radix</i>) (1:5) (extractant – ethanol 70 %) – 25 ml	LLC "DKP Pharmaceutical Factory"	Ukraine
	VALERIAN FORTE	film-coated tablets, 40 mg, 10 tablets in a blister; 5 or 10 blisters in a cardboard pack	1 tablet contains valerian root extract thick (<i>Valerianae radix extractum spissum</i>) (2.6–5.6:1) [extractant – ethanol 70.0 % (v/v)] calculated on dry matter – 40 mg	LLC "Ternopharm"	Ukraine
	VALERIAN EXTRACT	film-coated tablets, 20 mg; 10 tablets in a blister; 5 or 10 blisters in a cardboard pack	1 tablet contains valerian root extract thick (<i>Valerianae radix extractum spissum</i>) (2.6–5.6:1) [extractant – ethanol 70.0 % (v/v)], calculated on dry matter, – 20 mg	LLC "Ternopharm"	Ukraine
	VALERIAN RHIZOMA WITH ROOTS	rhizomes with roots, 50 g each in packs with an inner bag; 1.5 g each in a filter bag; 20 filter bags in a pack	1 pack contains rhizomes with roots of valerian (<i>Valerianae radix</i>) – 50 g; 1 filter pack contains rhizomes with roots of valerian (<i>Valerianae radix</i>) – 1.5 g	PrJSC Pharmaceutical Factory "Viola"	Ukraine

Continue of Table 1

№	Trade name	Dosage form	Composition of active ingredients	Manufacture	Country
	VALERIAN TINCULATE	tincture 25 ml in a glass bottle; 1 bottle in a pack; 25 ml or 50 ml in glass bottles; 25 ml or 50 ml in glass bottles, closed with dropper stoppers; 25 ml or 50 ml in a glass bottle, closed with dropper stopper; 1 bottle in a pack; 25 ml or 50 ml in polymer bottles, closed with dropper stoppers and caps; 25 ml or 50 ml in polymer bottles, closed with dropper stoppers and caps, 1 bottle in a pack	1 bottle contains tincture of valerian rhizomes with roots (Rhizomata cum radicibus Valerianae) (1:5) (extractant – 70 % ethanol) – 25 ml or 50 ml.	PrJSC Pharmaceutical Factory "Viola"	Ukraine
	VALERIAN TINCULATE	tincture for oral use; 25 ml in bottles; 25 ml in a bottle; 1 bottle in a pack; 50 ml in bottles; 1 bottle in a pack	1 bottle contains tincture of valerian roots (Valerianae radix) (1:5) (extractant – ethanol 70 %) – 25 ml	LLC "DKP "Pharmaceutical Factory""	Ukraine
	VALERICA	350 mg capsules, 10 capsules in a blister, 2 blisters in a cardboard pack	1 capsule contains valerian root (Valerianae Radix) powder – 350 mg	PJSC SIC "Borshchahivskiy CPP"	Ukraine
	VALERIAN	tincture for oral use; 25 ml in glass dropper bottles, 100 ml in glass bottles, 100 ml in a glass bottle, 1 bottle in a cardboard pack	1 bottle contains valerian tincture (Tincturae Valerianae) (1:5); (extractant – ethanol 70.0 % (v/v))	JSC "Lubnypharm"	Ukraine
	VALERIAN RHIZOMA WITH ROOTS	rhizomes with roots; 40 g and 50 g in packs with inner bag	1 pack contains valerian rhizomes with roots (rhizomata cum radicibus valeriane) 40 g or 50 g	JSC "Lubnypharm"	Ukraine
	VALERIAN RHIZOMA WITH ROOTS	rhizomes with roots 50 g or 100 g in packs with inner bag; 1.5 g in a filter bag, 20 filter bags in a pack; 1.5 g in a filter bag, 20 filter bags in a pack with inner bag	1 pack contains: valerian rhizomes with roots (Valerianae rhizomata cum radicibus) 50 g or 100 g; 1 filter pack contains: valerian rhizomes with roots (Valerianae rhizomata cum radicibus) 1.5 g.	PJSC "Liktravy"	Ukraine
	VALERIAN TINCULATE	tincture 25 ml in dropper bottles; 25 ml in a dropper bottle; 1 dropper bottle in a cardboard box; 30 ml in bottles or in bottles with dropper caps, or in bottles with first-opening control; 30 ml in a bottle or in bottles with dropper caps, or in bottles with first-opening control; 1 bottle in a cardboard box	1 bottle contains tincture of valerian roots (Radices Valerianae) (1:5) (extractant – ethanol 70 %) 25 ml or 30 ml.	SE "Agrofirma PE "Yan""	Ukraine
	VALERIAN TINCULATE	tincture for oral use, 25 ml in polymer bottles, sealed with dropper stoppers and polymer caps, 50 ml in glass bottles	1 bottle contains tincture of valerian roots (Valerianae Radix) (1:5) (extractant – ethanol 70 %) 25 ml or 50 ml	PJSC "Biolic"	Ukraine

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Continue of Table 1

№	Trade name	Dosage form	Composition of active ingredients	Manufacture	Country
	VALERIAN TINCULATE	tincture of 25 ml in bottles	1 bottle contains tincture of valerian roots (Valerianae radix) (1:5) (extractant – ethanol 70 %) 25 ml	PJSC "Fitopharm"	Ukraine
	VALERIAN EXTRACT	film-coated tablets, 20 mg; 50 tablets in bottles; 50 tablets in blisters; 10 tablets in a blister, 5 blisters in a pack	1 tablet contains valerian root extract (Valerianae radix) thick (extractant – ethanol 40 %) (calculated as isovaleric acid not less than 0.004 g) – 20 mg	PJSC "Fitopharm"	Ukraine
	VALERIAN TINCULATE	tincture 25 ml in glass dropper bottles or polymer bottles; 1 bottle in a cardboard pack; 25 ml in glass dropper bottles or polymer bottles	1 bottle contains tincture of valerian rhizomes and roots (Valerianae rhizoma cum radicibus) (1:5) (extractant – ethanol 70 %) – 25 ml; 1 ml contains 20 drops	LLC "Ternopharm"	Ukraine
	VALERIAN	film-coated tablets, 30 mg; 10 tablets in a blister, 3 blisters in a cardboard box; 20 tablets in a blister, 5 blisters in a cardboard box	1 tablet contains valerian dry extract (valerianae radix) (5–8:1) (extractant: water-alcohol solution) 30 mg	JSC "Sopharma"	Bulgaria
	VALERIAN EXTRACT	film-coated tablets, 20 mg, 10 tablets in blisters; 50 tablets in containers; 10 tablets in blisters, 5 blisters in a pack	1 tablet contains valerian rhizome with roots (valerianae radix) thick extract (1:2) (extractant – ethanol 40 % (v/v)) – 20 mg	JSC "Lubnypharm"	Ukraine
N05CM "Hypnotic and Sedatives (St. John's wort herb, <i>Hypericum perforatum</i> L.)"					
	NOVO-PASSIT	film-coated tablets, 10 tablets in a blister; 1 or 3 blisters in a box	1 tablet contains: dry extract of Novo-Passit (elderflowers (Sambusi flos), hawthorn leaves and flowers (Crataegi folium cum flore), St. John's wort herb (Hyperici herba), lemon balm herb (Melissae herba), passionflower herb (Passiflorae herba), hop cones (Lupuli flos), valerian root (Valerianae radix)) 157.5 mg; guaifenesin 200 mg	Teva Czech Industries s.r.o.	Czech Republic
	NOVO-PASSIT	oral solution 100 ml in a bottle; 1 bottle with a measuring cap in a box; 5 ml in a sachet; 30 sachets in a box	1 ml of solution contains: extract for Novo-Passit liquid (Hyperici herba (St. John's wort herb), Passiflorae herba (passionflower herb), Valerianae radix (valerian root), Crataegi folium cum flore (hawthorn leaves and flowers), Lupuli flos (hop cones), Melissae herba (melissa herb), Sambusi flos (elderberry flowers)) (1:13, extractant – water) 0.0775 g, guaifenesin 0.04 g	Teva Czech Industries s.r.o.	Czech Republic
	QUIET® 05 CM	oral solution; 100 ml in a bottle; 1 bottle with a dosing cup/dosing cup in a pack	1 ml of solution contains: complex sedative extract, thick from a mixture of hawthorn inflorescences (Crataegi folium cum flore), hop cones (Lupuli flos), St. John's wort herb (Hyperici herba), lemon balm leaves (Melissae folium), passionflower herb (Passiflorae herba), black elderberry flowers (Sambuci flos), valerian roots (Valerianae radix) (2–4:1), extractant 30 % ethanol – 77.5 mg; guaifenesin in terms of 100 % substance – 40 mg	JSC "Farmak"	Ukraine

Continue of Table 1

№	Trade name	Dosage form	Composition of active ingredients	Manufacture	Country
	CEDARISTON® CAPSULES	capsules, 10 capsules in a blister; 3 or 6 or 10 blisters in a cardboard box	1 capsule contains dry extract of St. John's wort herb 90 % (Hyperici herba) (5–7:1) [extractant ethanol 60 % (v/v)] 100 mg, dry extract of rhizomes with valerian roots (Rhizoma cum radicibus valerianae) (4–7:1) [extractant ethanol 60 % (v/v)] 50 mg	Pharma Wernigerode GmbH, Esparma Pharma Services GmbH, Advance Pharma GmbH	Germany
	SEDAVIT®	tablets, 10 tablets in a blister; 2 blisters in a cardboard pack	1 tablet contains Sedavit® thick extract in terms of dry matter – 170.0 mg, vitamin B6 (pyridoxine hydrochloride in terms of 100 % substance) – 3.0 mg, vitamin PP (nicotinamide in terms of 100 % substance) – 15.0 mg; 1 g of Sedavit® thick extract contains: flavonoids extracted with ethanol 35 % (1:4.5) from a mixture of: rhizomes with valerian roots (2 parts), hawthorn fruits (2 parts), St. John's wort herb (1 part), peppermint leaves (2 parts), hop cones (2 parts) – not less than 0.01 g (in terms of dry matter and rutin)	PJSC "Kyivmedpreparat"	Ukraine
	SEDAVIT®	oral solution in bulk: 100 ml in a glass or polymer bottle; 48 bottles in a cardboard box; in bulk: 100 ml in a glass jar; 48 jars in a cardboard box	Sedavit® liquid extract (Extractum sedaviti fluidum) (extractant – ethanol 35 % v/v) (1:4.5) – 0.94 ml from a mixture of LRS: valerian rhizome with roots (Valerianae Rhizoma cum Radicibus), hawthorn fruits (Crataegi fructus), St. John's wort herb (Hyperici herba), peppermint leaves (Menthae piperitae folium), hop cones (Lupuli flos); pyridoxine hydrochloride (vitamin B6) – 0.6 mg; nicotinamide (vitamin PP) – 3.0 mg	PJSC "Galychpharm"	Ukraine
	SEDAVIT®	oral solution 100 ml in a glass or polymer bottle; 1 bottle in a pack; 100 ml in a glass jar; 1 jar in a pack; 200 ml in a glass bottle; 1 bottle in a pack	Sedavit® liquid extract (Extractum sedaviti fluidum) (extractant – ethanol 35 % v/v) (1:4.5) – 0.94 ml from a mixture of LRS: valerian rhizome with roots (Valerianae Rhizoma cum Radicibus), hawthorn fruits (Crataegi fructus), St. John's wort herb (Hyperici herba), peppermint leaves (Menthae piperitae folium), hop cones (Lupuli flos); pyridoxine hydrochloride (vitamin B6) – 0.6 mg; nicotinamide (vitamin PP) – 3.0 mg	PJSC "Galychpharm"	Ukraine
N06AX25 "Other antidepressants (St. John's wort herb, <i>Hypericum perforatum</i> L.)"					
	DEPRIVIT	film-coated tablets, 60 mg, 10 tablets in a blister; 3 blisters in a pack	1 tablet contains 60 mg of St. John's wort extract 0.5 % (Hypericum perforatum), which corresponds to 0.3 mg of hypericin.	JSC "Kyiv vitamin factory"	Ukraine
	REMOTIV	film-coated tablets, 500 mg; 10 tablets in a blister; 3 or 6 blisters in a cardboard box	1 tablet contains dry extract of St. John's wort herb (Hypericum perforatum L.) (4–7:1) [corresponding to 0.10–0.30 % hypericin, not less than 6.0 % flavonoids and not more than 0.2 % hyperforin; extractant – ethanol 57.9 % (v/v)] – 500 mg.	Max Cellier Zone AG, Interlabor Belp AG, Labor Zollinger AG	Switzerland
	NEUROPLANT	film-coated tablets, 15 tablets in a blister; 1 or 2 blisters in a cardboard box	1 film-coated tablet contains 300 mg of dry extract of St. John's wort herb (Hypericum perforatum L.) (3–7:1) [extractant: methanol 80 % (v/v)]	Dr. Wilmar Schwabe GmbH & Co. KG	Germany

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End of Table 1

No	Trade name	Dosage form	Composition of active ingredients	Manufacture	Country
		N06BX21 "Other psychostimulants and nootropics (Temgicoluryl)"			
	TRANQUILAR® IC	tablets of 0.3 g, 10 tablets in a blister; 2 blisters in a cardboard pack	1 tablet contains temgicoluril 300 mg (0.3 g)	TDV "Interchem"	Ukraine
	MEBICAR IC	tablets of 0.5 g, 10 tablets in a blister; 1 or 2 blisters in a cardboard pack	1 tablet contains temgicoluril 500 mg (0.5 g)	TDV "Interchem"	Ukraine
	MEBICAR IC	tablets of 0.3 g, 10 tablets in a blister; 2 blisters in a cardboard pack	1 tablet contains temgicoluril 300 mg (0.3 g)	TDV "Interchem"	Ukraine
	MEBICAR-FARKOS	capsules, 300 mg, 12 or 10 capsules in a blister, 2 blisters in a pack	1 capsule contains temgicoluril 300 mg calculated on 100 % dry matter	LLC "Pharmaceutical Company "FarkoS""	Ukraine
	ADAPTOL®	500 mg tablets; 10 tablets in a blister; 2 blisters in a pack	1 tablet contains temgicoluril 500 mg	JSC "Olinepharm"	Latvia
	ADAPTOL®	300 mg capsules; 10 capsules in a blister; 2 blisters in a cardboard box	1 capsule contains temgicoluril 300 mg	JSC "Olinepharm"	Latvia
		N07XX "Other nervous system remedies (Glycine)"			
	GLYCINE	sublingual tablets 100 mg, 50 tablets in a blister; 1 blister in a cardboard box	1 sublingual tablet contains glycine 100 mg	"Arpimed" LLC	Republic of Armenia
	GLYCINE	sublingual tablets 100 mg, 10 tablets in a blister; 5 blisters in a cardboard box; 50 tablets in a blister; 1 blister in a cardboard box	1 tablet contains glycine 100 mg	PJSC "Chervona Zirka"	Ukraine
	GLYCINE	sublingual tablets 100 mg, 10 tablets in a blister; 5 blisters in a cardboard box; 50 tablets in a blister; 1 blister in a cardboard box	1 tablet contains glycine 100 mg	PJSC "Chervona Zirka"	Ukraine
	GLYCINE-DARNYTSYA	sublingual tablets 100 mg, 10 tablets in a blister pack; 3 or 6 blister packs in a pack	1 tablet contains glycine (calculated as 100 % dry matter) 100 mg	PJSC "Darnitsa"	Ukraine
	GLYCINE-HEALTH	sublingual tablets 100 mg 10 tablets in a blister; 5 blisters in a cardboard box; 30 tablets in a blister; 1 blister in a cardboard box	1 tablet contains glycine 100 mg	LLC "Zdorovya"	Ukraine
	GLICISED®	100 mg tablets, 10 tablets per blister; 5 blisters per pack	1 tablet contains glycine in terms of 100 % substance 100 mg	PJSC "Kyivmedpreparat"	Ukraine

Table 2 – Structure of the assortment of medicines for the symptomatic management of stress according to the ATC classification

ATC-code	Pharmacotherapeutic group	INN	Number of registered medicines (TN)	
			abs.	share, %
N07XX	Other nervous system remedies	Glycine	6	7,1
N06BX21	Other psychostimulants and nootropics	Temgicoluryl	6	7,1
N06AX25	Other antidepressants	<i>Hypericum perforatum</i> L.	3	3,5
N05CM	Hypnotic and sedatives	<i>Leonurus cardiaca</i> L.	14	16,5
		<i>Melissa officinalis</i> L.	21	24,7
		<i>Passiflora incarnata</i> L.	8	9,4
		<i>Valeriana officinalis</i> L.	20	23,5
		<i>Hypericum perforatum</i> L.	7	8,2
Total			85	100

assortment, while foreign one's account for 22 % (Figure 1).

According to the results, Ukraine is the absolute leader in the production of the herbal medicines for the symptomatic management of stress, which demonstrates the significant potential of domestic pharmaceutical manufacturing in the niche of phytotherapeutic direction. Taking into account the military events of the last four years, this trend is predictable and logical. The most represented Ukrainian manufacturers are JSC "Lubnypharm" (12 %), PJSC Pharmaceutical Factory "Viola" (12 %) and PJSC "Chervona Zirka" (9 %). Their products cover all major ATC groups, especially N05CM "Hypnotic and Sedatives".

Among the importers, the most common European countries: Germany (5 %), the Czech Republic (7 %), and Switzerland (1 %), which supply medicines from groups N05CM and N06AX25 with a high-quality standard, often based on extracts of St. John's wort herb, lemon balm herb and valerian root.

Based on dry valerian root extract and dry lemon balm herb extract, the German manufacturers produces two medicines from the ATC group N05CM "Hypnotics and sedatives": Dormiplant tablets by the Dr. Willmar Schwabe GmbH & Co., and Carvelis oral drops by the Dr. Gustav Klein GmbH & Co. KG, which are indicated not only for nervous excitability but also in the complex treatment of arterial hypertension, stage 1,2.

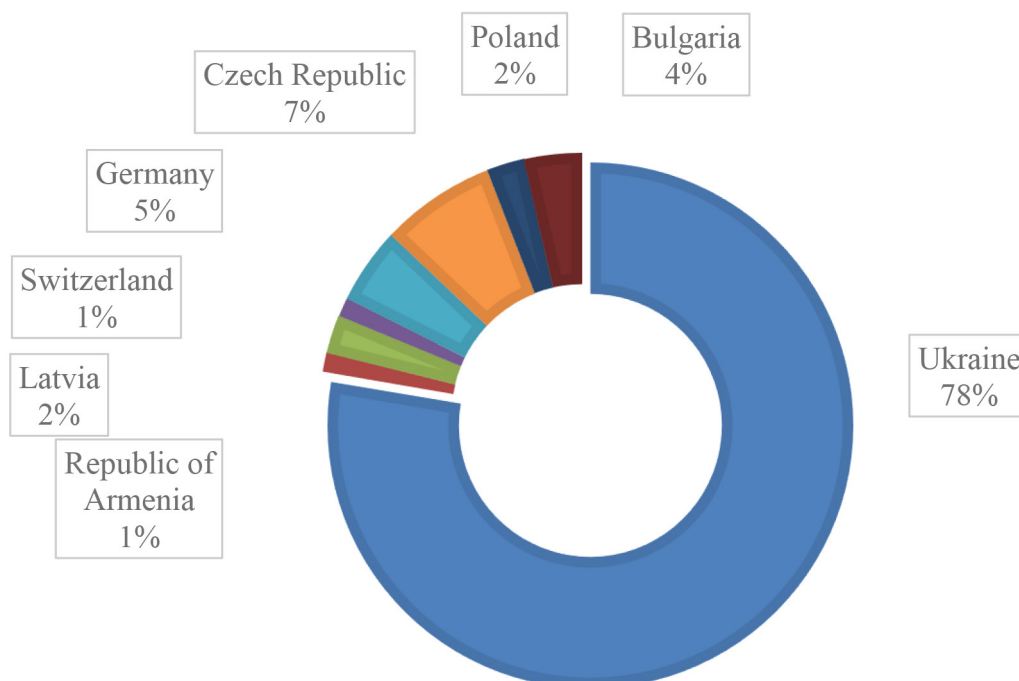


Fig. 1. Diagram of the assortment of medicines for the symptomatic treatment of stress by country of manufacturer

Based on a dry extract of St. John's wort herb, the German manufacturer Dr. Willmar Schwabe GmbH & Co. offers the effective medicine Neuroplant, belonging to the pharmacological group N06AX25 "Other antidepressants". The combined herbal medicine Sedariston® Capsules (N05CM) from the German manufacturer Pharma Wernigerode GmbH is also registered in Ukraine.

The Czech manufacturer Teva Czech Industries s.r.o. offers combined medicines under the trade name Novo-Passit in tablets and oral solution (N05CM "Hypnotics and sedatives").

The Swiss manufacturer Max Zeller Sühne AG introduced the effective mono-herbal medicine Remotiv tablets, based on a dry extract of St. John's wort herb using a unique extraction technology, belonging to the pharmacological group N06AX25 «Other antidepressants» and indicated for mild to moderate depressive disorders.

The Latvian manufacturer JSC "Olainfarm" is represented on the Ukrainian market by two trade names of temgicoluril-based medicines ("Adaptol®", 300 mg and 500 mg, N06BX21), while two Bulgarian manufacturers (JSC "Sopharma" and Adipharm EAD) offer 3 trade names of mono- and combined valerian root extract-based brand medicines (Valerian, Persen®, Persen® Forte).

Combined herbal remedies (N05CM) of Polish manufacturers Fitopharm Kłęka S.A. and PPF Hasco-Lek S.A. are represented on the Ukrainian market by two trade names: Vamelan and Compound Sedative Extract.

It should be noted that glycine-based medicines are almost entirely produced by Ukrainian manufacturers, except for one sublingual tablet form of Glycine from the Armenian manufacturer Arpimed LLC.

Thus, based on the recommendations of the Pharmacist's Protocol [10] the Ukrainian market of medicines for the symptomatic treatment of stress is largely formed by domestic manufacturers (78 %), that ensure a wide assortment and economic accessibility of medicines, mainly of herbal origin. The largest number of manufacturers is concentrated in the group N05CM, which includes sedative and hypnotic preparations based on herbs (lemon balm, valerian, St. John's wort, motherwort). Ukraine is represented by a wide range of manufacturers (both state-owned and private) offering different dosage forms: tinctures, tablets, extracts.

European companies, although having fewer TN, supply high-quality medicines, often original ones with a well-established reputation. At the same time, the presence of European companies increases qualitative diversity and consumer confidence in imported products. Such a balance makes it possible to meet both the demand for budget options and the need for original medicines.

The analysis of the medicines by dosage form (Figure 2) demonstrated the predominance of solid dosage forms (63 %), represented by film-coated tablets (21 %), tablets (11 %), sublingual tablets (6 %), capsules (15 %), and herbal raw materials in packs and filter bags (9 %). The remaining medicines are presented

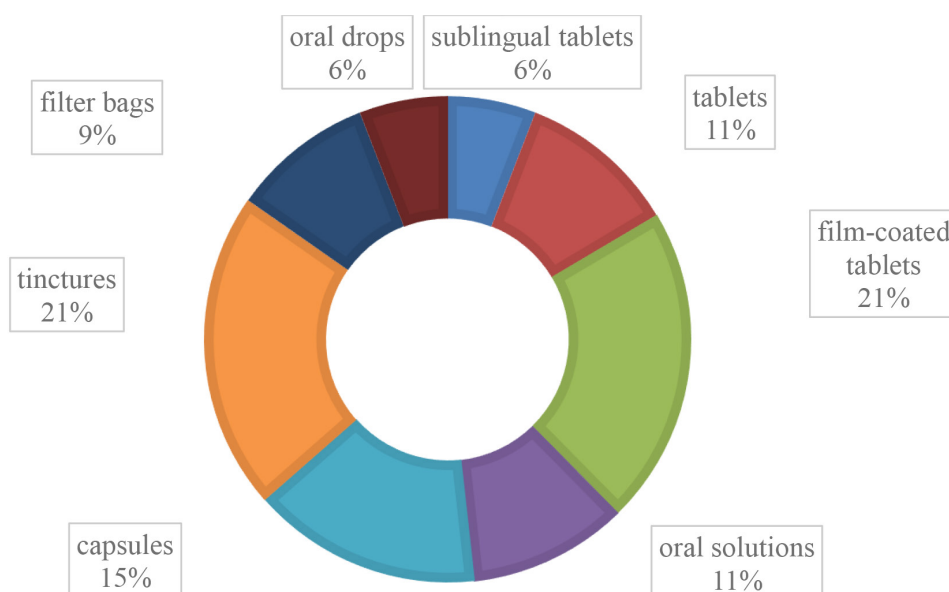


Fig. 2. Diagram of the assortment of medicines for the symptomatic treatment of stress by dosage form

in liquid dosage forms, accounting for 37 % of the assortment, including tinctures (21 %), oral solutions (10 %), and oral drops (6 %).

It should be noted that the most represented dosage form is the tablets. It is characteristic of the glycine-based medicines in particular sublingual tablets, as well as based on St. John's wort herb, valerian root, lemon balm herb and motherwort herb. The leading domestic manufacturers, including JSC "Farmak", JSC "Lubnypharm", PJSC "Kyivmedpreparat", LLC "Pharma Start", as well as some foreign pharmaceutical companies: Dr. Willmar Schwabe GmbH & Co. KG (Germany), Teva Czech Industries s.r.o. (Czech Republic), Max Zeller Söhne AG (Switzerland) offer medicines for the symptomatic treatment of stress in tablets dosage form.

Capsules represent the second most common dosage form. They are produced both by Ukrainian manufacturers, in particular, JSC "Farmak", PJSC "Chervona Zirka", JE "Sperco Ukraine" (in cooperation with Italy), and by foreign ones: Hasco-Lek S.A. (Poland), Adipharm EAD (Bulgaria). These forms are mainly used in combined herbal remedies with a pronounced sedative effect.

Tinctures and oral solutions, which are a traditional form for herbal raw materials, are mainly concentrated in the domestic segment. The largest number of such products are offered by PJSC "Fitofarm", LLC "Ternopharm", JSC "Lubnypharm", PJSC Pharmaceutical Factory "Viola", and PJSC "Galychpharm". Imported manufacturers in this group include,

in particular, Teva Czech Industries s.r.o., which supplies Novo-Passit medicines.

Herbal blends in filter bags are produced by specialized pharmaceutical enterprises PJSC "Liktravy" and PJSC Pharmaceutical Factory "Viola".

The wide range of presented dosage forms characterizes the production of most Ukrainian manufacturers as flexible and oriented towards a wide consumer segment, ensuring both physical and economic accessibility of medicines for the correction of stress, especially in the difficult times experienced by Ukrainians. Imported manufacturers, although inferior in quantity, supply the pharmaceutical market with original medicines with a high degree of standardization of herbal raw materials.

The next step of our study was the analysis of the pricing policy of OTC-medicines for the symptomatic treatment of stress (Figure 3) [12; 13].

According to the results of the analysis, it was established that prices vary over a wide range – from 13.00 UAH (Motherwort tincture) to 526.92 UAH (Sedistress tablets). The average difference between the minimum and maximum price is about 70–100 UAH; however, for some positions, this indicator is significantly exceeded, indicating high price variability within a single TN.

The price analysis revealed a correlation dependence of the cost of medicines on the dosage form. The obtained data were generalized into three groups: the cheapest medicines (up to 200.00 UAH), the mid-price

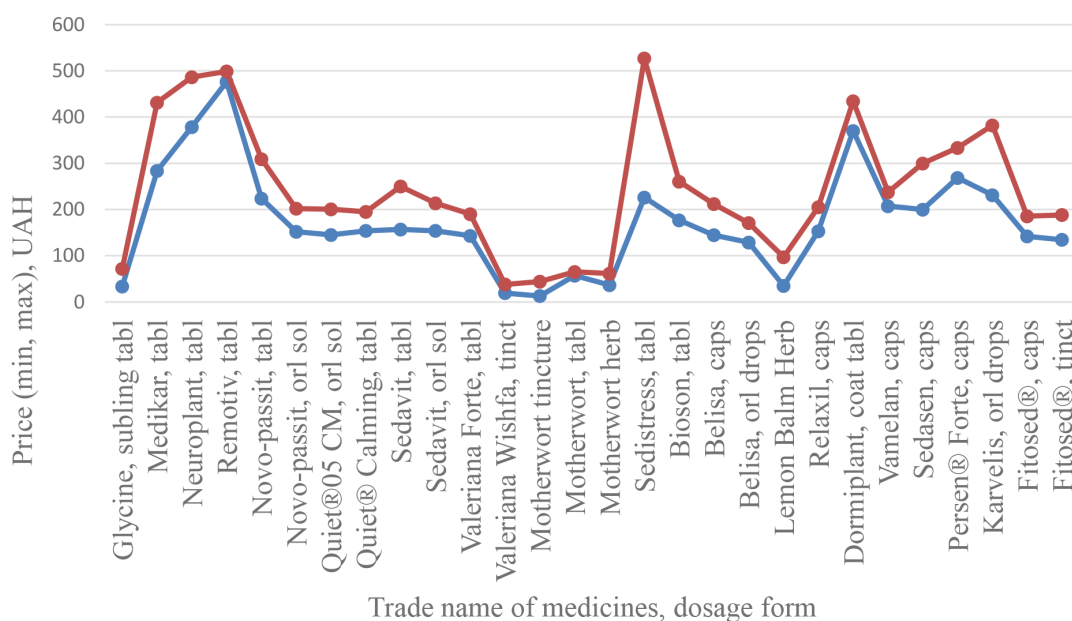


Fig. 3. Diagram of price variability for medicines used in the symptomatic management of stress

category (200.00–300.00 UAH), and high-cost medicines (above 300.00 UAH).

In the first group, tinctures dominated: Motherwort tincture (13.00–44.05 UAH), Valerian Vishpha (19.40–38.00 UAH), Phytosed® (134.70–188.32 UAH). The group with an average price level but high variability included tablets: from budget glycine (33.55 UAH) to Sedavit (154.10–213.56 UAH), Novo-Passit (223.70–309.00 UAH); as well as capsules: Vamelan (207.20–237.30 UAH), Persen® Forte (268.40–333.30 UAH). The mid-price segment includes liquid dosage forms – oral solutions: Novo-Passit (152.00–202.00 UAH), Belisa drops (128.70–170.80 UAH), Carvelis (231.00–382.00 UAH). Expensive medicines included premium imported antidepressants: Remotiv tablets (476.28–498.90 UAH), Neuroplant tablets (378.30–486.30 UAH), Sedistress tablets (225.90–526.92 UAH). Thus, the dosage form significantly affects the final cost, that is tinctures are the most affordable, domestic tablets and capsules belong to the mid-price category, and imported tablet forms to the high-price segment.

There is also a direct correlation between the cost of domestically produced and foreign medicines. The price of medicines produced by Ukrainian manufacturers ranges from 33.00 to 200.00 UAH (Glycine, Motherwort, Valerian, Sedavit, Quait, Belisa). The price of imported TN: Remotiv (Switzerland), Neuroplant and Dormiplant (Germany), Persen® Forte (Bulgaria), Sedistress (Czech Republic) ranges from 225.00 to 526.00 UAH. Thus, imported medicines, despite a similar composition of ingredients, are two times or more expensive than domestically produced ones.

The highest level of price fluctuation was observed for such positions as Sedistress tablets: $\Delta = 301.02$ UAH, Sedavit tablets: $\Delta = 93.20$ UAH, and Bioson tablets: $\Delta = 83.69$ UAH. It can be assumed that such price fluctuations are caused by the presence of a large number of manufacturers of one trade name, innovative production technologies or the consequences of market monopoly.

Thus, the analysis of price policy made it possible to establish that Ukrainian patients have the opportunity to choose medicines for the symptomatic management of stress according to their financial capabilities. The final cost of medicines is significantly influenced by the dosage form, country (domestic or imported), mono-component or combined composition, and degree of standardization of plant raw materials. In general, the market demonstrates a high

degree of accessibility for various social groups and competition between domestic and imported manufacturers, which forms a wide assortment and provides rational pharmacoeconomic justification for the choice of medicines.

CONCLUSIONS. 1. The pharmaceutical market of Ukraine includes a wide range of medicinal products of herbal and synthetic origin, both domestic and foreign manufacturers for the correction of stress disorders. It was established that as of 01.09.2025, 85 trade names of non-prescription medicinal products recommended for the symptomatic treatment of stress were registered.

2. Structural analysis of the studied medicinal products according to the ATC classification shows that 85.8 % of the range belong to the subgroup N05 CM “Hypnotic and sedatives”.

3. Analysis of the market segment by production characteristic indicates that 78 % of the range is domestic and 22 % is foreign-made.

4. It was established that solids prevail by type of dosage form: film-coated tablets (21 %), tablets (11 %), sublingual tablets (6 %), capsules (15 %), and herbal raw materials in packs and filter bags (9 %). The liquid dosage forms include tinctures (21 %), oral solutions (10 %), and oral drops (6 %).

5. It was determined that the range of drugs is dominated by combined preparations of natural origin – 85.8 % based on dry, thick or liquid extracts of St. John’s wort herb, valerian root, motherwort herb, passionflower herb, lemon balm herb.

6. The results can contribute to improving pharmaceutical care, supporting rational drug selection, informing healthcare decision-makers, and enhancing the accessibility of effective and safe sedative medicines for the Ukrainian population under conditions of prolonged psychosocial stress.

AUTHOR CONTRIBUTIONS ACCORDING TO CREDIT:

Cherniashova V.V. – data curation, investigation, resources, writing – review & editing; Oleshchuk O.M. – conceptualization, project administration, methodology;

Zelenevich Kh. V. – data curation, formal analysis, visualization, writing – original draft;

Pokotylo O. O. – supervision, investigation, methodology, resources, writing – review & editing;

Marchenko A. I. – formal analysis, validation, writing – original draft.

CONFLICT OF INTEREST: None declared.

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¹ ТЕРНОПІЛЬСЬКИЙ НАЦІОНАЛЬНИЙ МЕДИЧНИЙ УНІВЕРСИТЕТ
ІМЕНІ І. Я. ГОРБАЧЕВСЬКОГО МОЗ УКРАЇНИ

² ВОЛИНСЬКИЙ НАЦІОНАЛЬНИЙ УНІВЕРСИТЕТ ІМЕНІ ЛЕСІ УКРАЇНКИ

ПОРІВНЯЛЬНИЙ АНАЛІЗ АСОРТИМЕНТУ ЛІКАРСЬКИХ ЗАСОБІВ ДЛЯ СИМПТОМАТИЧНОГО ЛІКУВАННЯ СТРЕСУ

Резюме

Вступ. В Україні проблема стресу є надзвичайно актуальною у зв'язку зі складними соціальними, економічними та психологічними реаліями, що спричинені воєнним конфліктом, що триває, та його довгостроковими наслідками. Одним із найпоширеніших підходів до профілактики та симптоматичного лікування станів, пов'язаних зі стресом, є використання седативних, снодійних або ноотропних препаратів, зокрема рослинного походження, що мають м'яку дію та відносно низьку частоту побічних реакцій.

Метою дослідження є аналіз українського фармацевтичного ринку безрецептурних препаратів, що використовуються для симптоматичного лікування стресу.

Методи дослідження. У дослідженні використано дані з Державного реєстру лікарських засобів України, Протоколу фармацевта «Симптоматичне лікування стресу», онлайн-компендіуму, ресурсів «Apteki.ua», «Tabletki.ua».

Результати й обговорення. Результати дослідження показують, що станом на 1 вересня 2025 року на фармацевтичному ринку України зареєстровано 85 торгових найменувань безрецептурних препаратів, рекомендованих для симптоматичного лікування стресових розладів. Структурний аналіз за АТС-класифікацією показує, що 85,8 % асортименту належить до підгрупи N05 CM «Снодійні та седативні засоби». Аналіз сегмента ринку за країною-виробником показує, що 78 % асортименту – вітчизняного та 22 % – іноземного виробництва. Встановлено, що за типом лікарської форми переважають тверді лікарські форми: таблетки, вкриті плівковою оболонкою (21 %), таблетки (11 %), сублінгвальні таблетки (6 %), капсули (15 %), лікарські збори та фільтр-пакети (9 %). Рідкі лікарські форми включають настоянки (21 %), розчини для перорального застосування (10 %) та краплі для перорального застосування (6 %). Визначено, що в асортименті ОТС-препаратів переважають комбіновані засоби природного походження – 85,8 % на основі сухих, густих або рідких екстрактів трави звіробою, кореня валеріани, трави пустирника, трави пасифлори та трави меліси.

Висновки. Отримані дані можуть бути використані для оптимізації фармацевтичної допомоги, покращення раціонального вибору лікарських засобів і оптимізації процесів ухвалення рішень у сфері охорони здоров'я щодо лікування стресу.

КЛЮЧОВІ СЛОВА: стресові розлади; безрецептурні лікарські засоби; АТХ-класифікація; лікарські форми; фармацевтичний ринок.

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