RESEARCH ARTICLE

ISSN 2307-9266 e-ISSN 2413-2241

Scientific and Practical Journal
PHARMACY & PHARMACOLOGY

STUDY OF PHARMACEUTICAL SPECIALISTS' INFORMATION AWARENESS ON THE MATTERS OF DRUG ABUSE

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Received 31 Aug 2020 Accepted 20 Oct 2020

Prevention of non-medical use of drugs is the most important task of the state anti-drug policy of the Russian Federation, the effectiveness of which can largely be due to the professional awareness of pharmaceutical specialists, their compliance with the established regulations for the dispensing of drugs, and proper pharmaceutical advice.

The aim. The research of pharmaceutical specialists' information awareness on the matters of drug abuse.

Material and methods. The study was based on the analysis of the regulatory legal acts of the Russian Federation governing the procedure for prescribing and dispensing drugs, instructions for the medical use of the drugs used for the purpose of abuse. In the course of the study, a systematic approach has been applied. It includes methods of structural-logical, cluster and content analyses, methods of generalization and grouping. The study of pharmaceutical specialists' information awareness on the matters of drug abuse was carried out using a random sample survey using a specially developed questionnaire: 396 employees of pharmacy organizations of various forms of property from the Perm Territory, the Chelyabinsk and Kirov regions, the Udmurt and Chuvash Republics, the Komi Republic, were questioned in the period from 2017 to 2019. The questionnaire included 35 questions, structured in 4 blocks. The first block included questions on education, position, work experience of the respondents, the second – questions on identifying knowledge on the range of drugs used for abuse, and categories of consumers of such drugs. The third block contained questions on the regulation and compliance with the procedure for dispensing drugs. The fourth block of the questionnaire was intended to establish the methods and sources of obtaining information on the abuse of the drugs sold by specialists of pharmacy organizations.

Results. On the basis of the analysis carried out, an insufficient level of knowledge by specialists of the regulatory legal acts governing the trade of drugs, the range of drugs used for the purpose of abuse, and the categories of their consumers have been established. The violation of the rules for dispensing drugs has been revealed, as well as the lack of systematic sources of information on drug abuse.

Conclusion. The need to develop a training program for pharmaceutical specialists on the prophylaxis and prevention of drug abuse has been established. In order to work out additional competencies in the prevention of non-medical use of drugs and improve the quality of pharmaceutical consulting, it is necessary to conduct appropriate educational activities.

Keywords: pharmaceutical specialists' information awareness; drug abuse

ИЗУЧЕНИЕ ИНФОРМИРОВАННОСТИ ФАРМАЦЕВТИЧЕСКИХ РАБОТНИКОВ ПО ВОПРОСАМ ЗЛОУПОТРЕБЛЕНИЯ ЛЕКАРСТВЕННЫМИ ПРЕПАРАТАМИ

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Получена 31.08.2020 Принята к печати 20.10.2020

For citation: N.Yu. Porseva, A.V. Soloninina, O.N. Dvorskaya. Study of pharmaceutical specialists' information awareness on the matters of drug abuse. *Pharmacy & Pharmacology*. 2020;8(6):456-464. **DOI:** 10.19163/2307-9266-2020-8-6-456-464

Для цитирования: Н.Ю. Порсева, А.В. Солонинина, О.Н. Дворская. Изучение информированности фармацевтических работников по вопросам злоупотребления лекарственными препаратами. *Фармация и фармакология.* 2020;8(6):456-464. **DOI:** 10.19163/2307-9266-2020-8-6-456-464

Научно-практический журнал
ФАРМАЦИЯ И ФАРМАКОЛОГИЯ

ОРИГИНАЛЬНАЯ СТАТЬЯ
DOI: 10.19163/2307-9266-2020-8-6-456-464

Профилактика немедицинского использования лекарственных препаратов является важнейшей задачей государственной антинаркотической политики Российской Федерации, эффективность которой в значительной степени может быть обусловлена профессиональной информированностью фармацевтических работников, соблюдением ими установленных регламентов отпуска лекарственных препаратов и надлежащего фармацевтического консультирования.

Цель. Изучение информированность фармацевтических специалистов по вопросам злоупотребления лекарственными препаратами.

Материал и методы. Исследование базировалось на анализе нормативных правовых актов Российской Федерации, регламентирующих порядок назначения и отпуска лекарственных препаратов, инструкций по медицинскому применению лекарственных препаратов, используемых с целью злоупотребления. В процессе исследования использовался системный подход, включающий в себя методы структурно-логического, кластерного и контент-анализов, методы обобщения и группировки. Изучение информированности фармацевтических работников по вопросам злоупотребления лекарственными препаратами проводилось методом случайного выборочного опроса по специально разработанной анкете: 396 работников аптечных организаций различных форм собственности из Пермского края, Челябинской и Кировской областей, Удмуртской и Чувашской Республик, Республики Коми в период с 2017 по 2019 годы. В анкету были включены 35 вопросов, структурированных в 4 блока. В первом блоке были включены вопросы по образованию, должности, стажу работы респондентов, во втором – вопросы по выявлению знаний по ассортименту лекарственных препаратов, используемых с целью злоупотребления и категориям потребителей таких лекарственных препаратов. В третьем блоке содержались вопросы по регламентации и соблюдению порядка отпуска препаратов. Четвертый блок анкеты предназначался для установления способов и источников получения информации по вопросам злоупотребления препаратов, используемых специалистами аптечных организаций.

Результаты. На основе проведенного анализа установлен недостаточный уровень знаний специалистами нормативных правовых актов, регламентирующих обращение лекарственных препаратов, ассортимента лекарственных препаратов, используемых с целью злоупотребления и категорий их потребителей. Выявлено нарушение правил отпуска лекарственных препаратов, отсутствие систематизированных источников информации по вопросам злоупотребления лекарственными препаратами.

Заключение. Установлена необходимость разработки программы повышения квалификации фармацевтических работников по вопросам профилактики и предотвращения злоупотребления лекарственными препаратами. С целью формирования дополнительных компетенций по профилактике немедицинского употребления лекарственных препаратов и повышения качества фармацевтического консультировании необходимо проводить соответствующие образовательные мероприятий.

Ключевые слова: информированность фармацевтических специалистов; злоупотребление лекарственными препаратами

INTRODUCTION

Over a period of several years, drug abuse has remained a serious public health problem, both in Russia and abroad. A review of literature sources made it possible to establish that the unfavorable situation associated with the facts of non-medical use of drugs continues to persist [1–7].

Most often, drugs with psychoactive effects are used for non-medical purposes. These drugs are used to achieve a state of doping (temulence), which occurs after taking a drug, and consists in disorders of consciousness, cognitive functions, perception of reality, emotions, behavior, reactions, statics, motion coordination, vegetative and other functions [1, 6–11].

Popular medicinal preparations (MPs) containing codeine or dextromethorphan [1, 4, 12–14], m-cholinoblockers [6, 8, 15–17], benzodiazepine derivatives and somnifacients of the non-benzodiazepine series [2, 18–20], baclofen [21, 22] , pregabalin [5, 7, 11] and others, are used to enhance the narcotic effect of opioids, relieve abstinence symptoms (in the formed drug abuse), potentiate the effect of alcohol, and to individually achieve a state of doping, which can lead to negative consequences, including overdose or drug addiction.

The problem of non-medical use of drugs is of great social importance, since the main category of consumers is the young generation. The authors notify that the phenomenon of intoxication with the use of available drugs is a serious problem among adolescents, however, there have been suicide cases caused by the use of available drugs in adolescents without an established fact of abuse, and it is described in the literature data [8].

It has been also emphasized that this kind of drugs are used in suicide attempts, especially among women. When analyzing intoxication cases, their seasonal prevalence was also notified [4, 20, 23].

According to “Strategy of the State Anti-Drug Policy of the Russian Federation until 2020” [1], the abuse of drugs with psychoactive effects poses a serious threat to the security of the state and the healths of its population. Within the framework of this Strategy, the intensified work is being carried out to stabilize the drug

[1] Decree of the President of the Russian Federation of 09.06.2010 No. 690 “On Approval of the Strategy of the State Anti-Drug Policy of the Russian Federation until 2020”. Available from: http://www.consultant.ru/document/cons_doc_LAW_101259/ (Date of access 19 Aug 2019).

situation and non-medical use of drugs, including the implementation of preventive measures among the population.

The main source of purchase of the above-mentioned drugs is pharmacy organizations (PhOs), whose specialists must have updated information about the range of drugs, categories of consumers, the consequences of abuse and regulation of drug dispensing from pharmacies in order to prevent their subsequent non-medical use. Herewith, the role of a pharmaceutical specialist in the prevention of drug addiction and the prevalence of drug abuse is increasing. This is ensured by compliance with the rules for dispensing drugs from PhOs and providing appropriate pharmaceutical advice.

THE AIM of our study is the research of pharmaceutical specialists' information awareness on the matters of drug abuse.

MATERIAL AND METHODS

The study is based on the regulatory legal acts governing the procedure for prescribing and dispensing drugs, instructions for the medical use of drugs used for the purpose of abuse. In the course of the study, a systematic approach has been applied. It includes methods of structural-logical, cluster and content analyses, methods of generalization and grouping. The study was carried out using a random sample survey of the pharmaceutical specialists from the Perm Territory, the Chelyabinsk and Kirov regions, the Udmurt and Chuvash Republics, the Komi Republic, in the period from 2017 to 2019. The number of the specialists required for the study, had been determined by the formula for calculating a representative sample size for sociological researches [24]. 396 employees of the PhOs took part in the survey. To assess the professional competence of specialists in this area, a questionnaire had been made up. It included 35 questions, structured in 4 blocks. The first block included questions on education, position, work experience of the respondents, the second – questions on identifying knowledge on the range of the drugs used for abuse, and categories of consumers of such drugs. The third block contained questions on the regulation and compliance with the procedure for dispensing drugs. The fourth block of the questionnaire was intended to establish the methods and sources of obtaining information on the abuse of the drugs used by specialists of pharmacy organizations.

RESULTS

The processing of the questionnaires showed that the sample included specialists with higher pharmaceutical education (142 specialists -35.8%); secondary pharmaceutical education (234 people – 59.1%); 20 specialists (5.1%) with secondary and higher kinds of pharmaceutical education.

Grouping of the respondents by the positions occupied, showed the following: 59.1% of the respondents hold the position of a pharmacist; 39.9% were pharmaceutical sales representatives; 1.0% worked as trading floor administrators.

The results of the pharmaceutical specialists' distribution by work experience in PhOs gave grounds to conclude that the majority of the respondents have a work experience from 5 to 20 years or more (91.9%), the rest have the experience from 1 to 5 years (8.1%).

Almost half of the respondents (40.9% – 162 people) are specialists with a pharmaceutical experience from 5 to 10 years, 83 specialists have the experience from 10 to 15 years (21%), 48 employees (12.1%) have been working in PhOs from 15 to 20 years, and 71 specialists (17.9%) have over 20 years of work experience.

The study of the survey data revealed that, along with the regulated mandatory advanced training in educational programs of additional vocational education, followed by obtaining a specialist certificate at least once every 5 years (100% of respondents), pharmaceutical specialists regularly improve their professional qualifications in various ways, i.e.:

– participate in educational conferences and seminars with the involvement of specialists – 61.4% of the interviewed employees;

– receive information from professional printed issues – 60.1% of PhO employees;

– use reference materials in their work – 55.6% of the respondents;

– attend trainings and classes conducted by pharmacy organizations – 34.8% of employees (Fig. 1).

One of the main tasks of the survey was to study the professional awareness of pharmacies' employees about the drug groups that can be used for other than medical purposes, the order of their dispensing, as well as the completeness of the specialists' knowledge of the drugs most often misused.

In the questionnaire, there were "Combined medicinal preparations containing codeine", "Combined medicinal preparations containing dextrometrophan", and specific names of drugs – tropicamide, cyclopentolate, etc., as well as proposed prescription forms for their dispensing from PhOs.

When analyzing the questionnaires, it was found out that the respondents identified 13 groups of drugs (represented by 19 pharmacotherapeutic groups) used (in their opinions) for the purpose of abuse. The largest number of respondents notified such groups of drugs as M-cholinoblockers containing tropicamide and cyclopentolate (92.7%), analgesics and alcohol-containing drugs (89.9%).

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DOI: 10.19163/2307-9266-2020-8-6-456-464

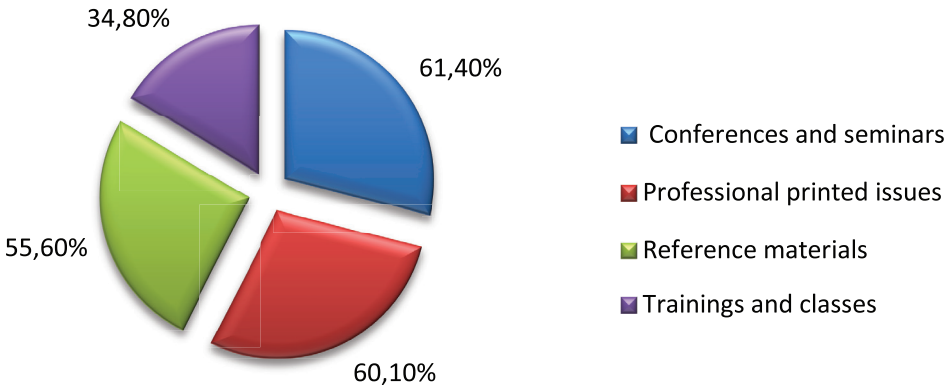

Figure 1 – Ways of advanced training by employees of PhOs

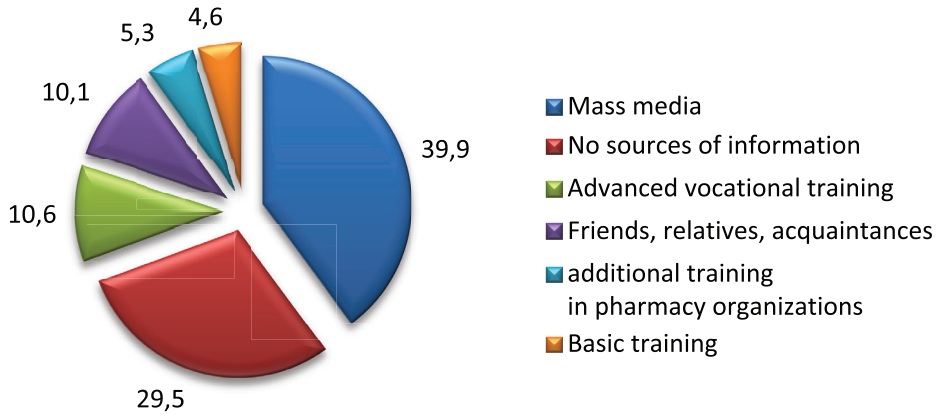

Figure 2 – Methods of advanced training by PhO employees

Almost half of the specialists pointed out at the acquisition of drugs for non-medical purposes. They were as follows: from the muscle relaxant groups (48.9%), antiepileptic drugs (50.0%), as well as combined drugs containing dextromethorphan (46.2%). In the questionnaires, about 40.0% of the respondents notified combined drugs containing codeine (39.4%), and alpha-adrenergic agonists (35.1%). In the questionnaires, fewer than a third of the specialists paid great attention to the drugs used not only for medical purposes: benzodiazepine derivatives (28.2%), combined drugs containing ephedrine (24.7%), antidepressants (14.6%) and somnifacients of the non-benzodiazepine series.

According to the opinions of the pharmaceutical specialists, in the course of the questionnaire survey, some specific medicinal preparations were also identified as requested for misuse.

The majority of the respondents identified a combined analgesic MP containing dicycloverin 20.0 mg + paracetamol 500.0 mg (the "Analgesics" group), alcohol-containing solutions/tinctures (89.9%), as well as tropicamide (the "M-anticholinergics" group) – 75.0%.

Almost half of the specialists focused their attention on purchasing the following drugs for non-medical purposes: 50.0% – pregabalin from the "Antiepileptic drugs" group and 48.9% – baclofen (the "Muscle relaxants" group). According to the respondents, the following medicinal preparations are purchased for misuse: dextromethorphan 15.0 mg + paracetamol 500.0 mg + phenylephrine 10.0 mg + chlorphenamine 2.0 mg from the group of "Combined medicinal preparations containing dextromethorphan" (39.9%); codeine 10.0 mg + caffeine 50.0 mg + metamizole sodium 150.0 mg + paracetamol 300.0 mg + phenobarbital 15.0 mg (30.1%) from the group of "Combined drugs containing codeine"; naphazoline from the group of "Alfa-adrenergic agonists" (35.1%).

Some respondents also identified other drugs, including: bromodihydrochlorophenylbenzodiazepine from the group of "Medicinal preparations, benzodiazepine derivatives" (28.2%); a combined preparation containing ephedrine 4.6 mg + glaucine 5.75 mg in the composition from the group of "Combined drugs containing ephedrine" (24.7%); diphenhydramine from the "Antiallergic agent" group (21.9%); doxylamine from the group of "Somnifacients " (15.9%); amitriptyline from the group of "Antidepressants" (14.6%).

In the course of the survey, it turned out that pharmacies are asked for the medicines of all these groups. Nevertheless, some of the pharmacists do not pay spe-

cial attention to such demands or do not have sufficient knowledge of the possible consequences of non-medical use of the drugs.

The prevailing number of respondents (356 people) notified different drugs purchased (in their opinions) not for medical purposes, while 40 informants generally believe that drugs cannot be purchased for misuse.

Judging by the questionnaire data, the main consumers of drugs for non-medical purposes are adolescents and the young generation. The exception is the acquisition of alcohol-containing drugs (100 ml) by elderly people, mainly men, as well as middle-aged and elderly women, who mainly buy 25 ml of motherwort, hawthorn, peony tinctures – "They come every day or take 30 packs at once" (hereinafter, a quote from a questionnaire). Herewith, in the questionnaires, the respondents indicate that the number of regular consumers of alcohol-containing products is, on average, 10-15 people, and in some pharmacies it reaches 20. As a rule, each of the buyers can come 3 to 6 times a day. Moreover, pharmaceutical spelialists "would be glad not to sell these drugs but there are no legislative grounds for refusal," and the management of pharmacies classifies alcohol-containing drugs (in particular, in the volume of 100 ml) as a high-margin group of goods, therefore, they do not strive to remove them from the pharmacy assortment.

One of the important tasks of the survey was to study the pharmaceutical specialists' information awareness about the regulation and compliance with the rules for dispensing drugs from PhOs, used for the purpose of abuse.

As a result of studying the pharmaceutical specialists' information awareness about the regulation of the procedure for dispensing combined drugs containing codeine, dextromethorphan, ephedrine, it was found out that 60 specialists out of 396 (15.1%) know the normative document governing this procedure.[2]

In accordance with the regulatory standards[3], dispensing of combined medicinal preparations containing codeine, is carried out by 89.9% of specialists (356 people) on the basis of the 148-1/u-88 prescription form; the remaining 10.1% believe that prescribing and dispensing such medicinal preparations should be provided by the 107-1/u prescription form.

The opinions of pharmacy specialists were divided when answering the question: "What is the order for dispensing combined MPs containing dextromethorphan (cough syrups)?" Despite the requirements of the regulatory document governing the procedure for dispensing these drugs on the basis of the 148-1/u-88 prescription form[4], only 237 specialists (59.8%) believe that the listed drugs should be dispensed on the basis of the 148-1/u-88 prescription form; 139 surveyed employees (35.1%) claim that it should be the 107-1/u prescription form; 20 people (5.1%) believe that these drugs are available without a prescription

The survey data showed that dispensing of a combined medicinal product containing 15.0 mg dextromethorphan + paracetamol 500.0 mg + phenylephrine 10.0 mg + chlorphenamine 2.0 mg (which must be drawn using the 107-1/u prescription form), should be carried out (according to the pharmaceutical specialists' opinions) in the following way: 88 specialists (22.2%) believe, it should be sold on the basis of the 148-1/u-88 prescription form, 281 (71.0%) believe – on the basis of the 107-1/u prescription form, and 27 (6.8% of the employees) – without a doctor's prescription.

The majority of PhO employees (324 people, 81.8%) believe that a combined drug containing 4.6 mg ephedrine + 5.75 mg glaucine, is dispensed according to the 107-1/u prescription form, 49 people (12.4%) believe that the prescription form should be 148-1/u-88, and 23 people (5.8%) believe that this drug can be dispensed without a prescription.

More than half of pharmacy specialists (55.8%) know that bromodihydrochlorophenylbenzodiazepine should be dispensed according to the 107-1/u prescription form. A significant part (39.4%) of the interviewed specialists answered that this drug is dispensed according to the 148-1/u-88 prescription form, and 4.8% of PhO specialists believe that this drug can be dispensed without a prescription.

The following answers were received to the question about the procedure for dispensing medicinal preparation baclofen (it is to be dispensed according to the 107-1/u prescription form): according to the 148-1/u-88 prescription form (opinions of 5.3% of employees), according to the 107-1/u prescription form (86.1%), without a doctor's prescription (8.6%).

A study of the procedure for dispensing a combined drug containing dicycloverine 20.0 mg + paracetamol 500.0 mg showed that 84.6% of the surveyed pharmaceutical specialists know about the possibility of its dispensing without a prescription, and the remaining

[2] Order of the Ministry of Health and Social Development of the Russian Federation of 17 May 2012 No. 562n "On Approval of the Procedure for Dispensing Medicines for Medical Use to Individuals Containing Other Pharmacological Active Substances in addition to small amounts of narcotic drugs, psychotropic substances and their precursors". Available from: http: //www.consultant.ru/document/cons_doc_LAW_130675/ (Date of access 26 Aug 2019). Russian

3 http: //www.consultant.ru/document/cons_doc_LAW_130675/

[4] Order of the Ministry of Health and Social Development of the Russian Federation of 17 May 2012 No. 562n "On Approval of the Procedure for Dispensing Medicines for Medical Use to Individuals Containing Other Pharmacological Active Substances in addition to small amounts of narcotic drugs, psychotropic substances and their precursors". Available from: http: //www.consultant.ru/document/cons_doc_LAW_130675/ (Date of access 26 Aug 2019). Russian

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DOI: 10.19163/2307-9266-2020-8-6-456-464

15.4% believe that the drug belongs to the prescription group of medicinal preparations.

All specialists notified that they have difficulty in dispensing a combined medicinal preparation prescribed by a group name, and they do not have any available source of information about group names of medicinal preparations in Latin.

It should be notified that the regulatory document contains requirements for the mandatory prescription of medicinal preparations in Latin by the international non-proprietary name (INN), in case of its absence – by a group or chemical name. However, in the available official sources of information about medicinal preparations ("State Register of Medicinal Remedies" [5], instructions for medical use of drugs, etc.), such information is not available. In some cases (in accordance with the requirements of the narcological dispensary), in the presence of medical grounds, the prescription of medicinal preparations is carried out according to trade names by decision of the medical commission of a medical organization, while a special mark (stamp) is put on the back of the prescription.[6]

To the question "How should a prescription be drawn up in case of prescribing a combined drug by trade name?" the opinions of pharmaceutical specialists were divided: 75.0% believe that a special mark (stamp) of the medical commission should be put on the back of the prescription (according to the rule), and 25.0% believe that the prescription does not require additional registration.

The prescriptions drawn up on forms 148-1/u-88 should be stored in the PhOs after the release of combined codeine-containing drugs, but only 79.5% of specialists know about this. Judging by the questionnaire data, 5.1% of the surveyed pharmacy specialists believe that there is no need to store prescriptions in a pharmacy, and 15.4% of respondents do not know the answer to this question. Despite the regulation of the mandatory storage of prescriptions for combined preparations containing dextromethorphan (cough syrups) in the pharmacy for 3 years, only a little over a half of drug dispensing specialists (55.6% – 220 people) believe that PhOs should keep such recipes; 19 respondents (4.8%) argue that such recipes should not be stored in PhOs; 157 specialists (39.6%) found it difficult to answer.

To the question "How long is the protocol storage period for the prescriptions for combined MPs containing codeine and dextrometrophan (cough syrups) [7], provided by PhOs?" 64.9% of the respondents answered the question correctly (within three years), 13.6% believe that prescriptions should be stored for 5 years and 21.5% of specialists are sure that such recipes should not be stored in a pharmacy.

In accordance with the established requirements, prescriptions for combined MPs containing dextromethorphan 15.0 mg + paracetamol 500.0 mg + phenylephrine 10.0 mg + chlorphenamine 2.0 mg and ephedrine 4.6 mg + glaucine 5.75 mg, issued for 107-1/u forms, must be redeemed with the stamp "The drug has been dispensed". [8] However, the study of the survey results showed that 64 pharmaceutical specialists (16.2%) out of 396 respondents theoretically know about the need to redeem the prescription for these drugs, the remaining 83.8% do not have this information. At the same time, not a single specialist redeems prescriptions for these MPs with a stamp. In some PhOs the stamp "The drug has been released" is missing at all.

The study of compliance with the procedure for the release of medicines showed that all respondents know: the release of prescription medicines without a prescription form is a gross violation of licensing requirements.[9] Despite this, all employees involved in the survey (100.0%) dispense prescription drugs (form 107-1/y) without a doctor's prescription.

To the question "Will you release the drug, assuming in advance that it is used not for medical purposes?" – 68 pharmaceutical specialists (17.2%) gave a negative answer, the rest 328 (82.8%) answered in the affirmative.

According to the pharmaceutical specialists, the main reasons for deliberate drug dispensing without prescriptions, used for abuse, are: the desire to increase the pharmacy's revenue (notified by 317 respondents – 80.1%), lack of information on drug abuse (notified by 198 people – 50.0%) and indifference to the problems of buyers (42 respondents – 10.6%) for a total.

As a result of studying the methods of obtaining in-

[5] State Register of Medicines. Available from: http://grls.rosminzdrav.ru/default.aspx (Date of access 23 Aug 2019). Russian

[6] Order of the Ministry of Health of the Russian Federation 14 of January 2019 No. 4 "On approval of the procedure for prescribing medicinal products, forms of prescription forms for medicinal products, the procedure for issuing these forms, their accounting and storage". Available from: http://www.consultant.ru/document/cons_doc_LAW_321140/ (Date of access 26 Aug 2019)

[7] Order of the Ministry of Health of the Russian Federation of January 14, 2019 No. 4 "On approval of the procedure for prescribing medicinal products, forms of prescription forms for medicinal products, the procedure for issuing these forms, their accounting and storage". Available from: http://www.consultant.ru/document/cons_doc_LAW_321140/ (Date of access 26 Aug 2019)

[8] Order of the Ministry of Health and Social Development of the Russian Federation of 05 May 2012 No.562n "On Approval of the Procedure for Dispensing Medicines for Medical Use to Individuals Containing Other Pharmacological Active Substances in addition to small amounts of narcotic drugs, psychotropic substances and their precursors"http://www.consultant.ru/document/cons_doc_LAW_130675/ (Date of access 26 Aug 2019)

[9] Decree of the Government of the Russian Federation of 22 December 2011 No.1081 "On licensing of pharmaceutical activities"http://www.consultant.ru/document/cons_doc_LAW_124279/ (Date of access 26 Aug 2019)

formation by pharmacists on the matters of non-medical use of MPs, the following was revealed:

– 39.9% of the total number of surveyed pharmaceutical specialists (158 people) acquire knowledge on the matters of non-medical use of drugs independently with the help of the mass media;

– 29.5% of the respondents (117 people) claim that there are no sources of information for them on the topic of the survey;

– 10.6% of specialists (42 employees) acquire information while taking advanced vocational training;

– 10.1% of specialists (40 p employees) acquire knowledge in this area from friends, relatives, acquaintances (cases from life);

– 5.3% of specialists (21 employees) learn about drug abuse during additional training conducted in pharmacy organizations;

– the rest of the specialists (4.6% – 18 employees) acquire information while receiving secondary vocational or higher education (Fig. 2).

The prevailing number of respondents (297 people – 75.0%) are confident in the need for special training on the subject of assortment and regulation of the release of drugs used for abuse. 78.8% of pharmaceutical specialists also believe that the availability and use of systematized information on the range and regulation of the release of drugs used for abuse, will help to improve their professional level.

All the pharmaceutical professionals interviewed confirmed the need for more information on the drugs used for abuse.

As shown by the results of the survey, the opinions of pharmaceutical specialists on drug dispensing, in a number of cases do not coincide with the requirements of regulatory documents, despite the fact that more than half (51.0%) of the respondents are experienced professionals with more than 10 years of work experience. The actions of specialists often contradict the legislation and ethical and deontological norms adopted in pharmacy. It should be notified that at the stage of patient care, specialists do not strive to prevent drug abuse.

DISCUSSION

The results of our study showed that the percentage of pharmaceutical specialists who know the assortment of drugs that can be used for non-medical purposes is low and differs depending on the drug group. For example, combined drugs containing dextromethorphan were identified by 6% of PhO employees; combined drugs containing ephedrine – by 25% of them; the drugs, benzodiazepine derivatives – by 28%; muscle relaxants – by 49%, somnifacient of the non-benzodiazepine series doxylamine – by 16%, etc.

The majority of specialists have not demonstrated the knowledge of all possible groups of drugs used for abuse, due to the lack of awareness on the topic of abuse. The results of the survey revealed the pharmaceutical specialists who had not named any of the listed drug groups.

PhO employees do not in full know the requirements of regulatory documents governing the rules for dispensing MPs, which leads to their violations. Many specialists dispense prescription drugs without a doctor's prescription. Knowing about the possibility of non-medical use of drugs, most of the interviewed specialists still release them, explaining this by the desire to increase the pharmacy's revenue, lack of information on abuse matters and indifference to the problems of buyers.

All specialists experience difficulties in dispensing combined MPs, prescribed in drug orders according to a group name, and they do not have an available source of information on the group names of MPs in Latin. 25.0% of PhO employees who have taken part in the survey, do not know the requirements for drawing up drug orders in case of prescribing a combined MP by trade name.

117 specialists (29.5%) do not have a source of information on the matters of non-medical use of MPs. A rather low percentage of the specialists receive such information in the courses of training under the programs of secondary vocational or higher education (4.6%) and advanced training (10.6%).

The analyses of the survey data of the PhO employees on the level of pharmaceutical education, position held, work experience and training in additional professional training programs, suggests the presence of a fairly high percentage of specialists with professional knowledge and sufficient experience among the sample size of 396 people. However, the results of studying the specialists' information awareness showed that more stable knowledge on drug abuse matters was demonstrated by specialists from 5 to 10 years of work experience, while pharmaceutical specialists with more than 20 years of experience have a low level of knowledge.

CONCLUSION

Thus, the study carried out indicates a lack of awareness on the non-medical use of drugs among pharmaceutical specialists. It gives a possibility to conclude that the attention paid to these matters during training in advanced training programs, is insufficient. This necessitates the development of a special advanced training program for additional professional education on the prophylaxis and prevention of drug abuse. It is necessary to conduct appropriate educational activities in order to form additional competencies among pharmaceutical specialists in the prevention of non-medical use of drugs. It is important to improve the quality of pharmaceutical consulting, as well as to motivate employees to self-education and awareness of responsibility for human health.

ОРИГИНАЛЬНАЯ СТАТЬЯ
DOI: 10.19163/2307-9266-2020-8-6-456-464

FUNDING
This study did not receive any support from outside organizations.

CONFLICT OF INTEREST
The authors declare no conflict of interest

AUTHORS' CONTRIBUTION
N.Yu. Porseva – study design; review of publications on the topic of the article; data collection; analysis and interpretation of study results; text writing, formulation of conclusions; A.V. Soloninina – study design; formulation of conclusions; editing and revision of the article; O.N. Dvorskaya – a review of publications on the topic of the article; data collection; interpretation of research results; editing of the article

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