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E-mail: [karlygash-2303@mail.ru](mailto:karlygash-2303@mail.ru); [info@kncdiz.kz](mailto:info@kncdiz.kz); [msaparbekov@mail.ru](mailto:msaparbekov@mail.ru)**SCIENTIFIC JUSTIFICATION FOR THE IMPLEMENTATION  
OF THE INTEGRATED MODEL OF RAPID TESTING FOR  
HIV-INFECTION AMONG KEY POPULATIONS OF KAZAKHSTAN**

**Abstract.** In the pipeline justify scientifically the approached on the integration of the primary health care and the Service for AIDS prevention and control when rendering services on rapid testing among key populations.

It is noted that methodological basis for integration of the measures in case of HIV-infection with PHC was WHO / UNAIDS strategy "90-90-90", in which it is stated that for effective reaction to and prevention of the spread of HIV infection among key populations, it is recommended to implement an integrated set of measures including diagnosis, treatment and care connected with HIV-infection. It is noted that the integration of primary health care among key populations is carried out within the scope of the statutory free medical assistance (SFMA) and the compulsory health insurance system (CHIS). Rapid testing, pre-and post-test consulting for HIV infection, hepatitis, and STD of key populations when integrating with PHC is carried out in medical organizations, clinics, drop-in centres (DS), people-friendly offices (PFO), NGOs with the involvement of social workers and outreach workers. The integrated activities foresee social support that shall provide access both to medical and psychosocial support services for the key populations.

**Keywords:** integration, primary health care, service for AIDS prevention and control, key groups, rapid testing for HIV-infection.

**Introduction.** The growing and the spread of HIV infection in the world are forcing States and the international world community as a whole to form and develop global and national strategies in order to guide and support the integrated response measures on the implementation of the political Declaration of Commitment on HIV/AIDS, the UNAIDS Operating plan for setting national targets on response to the HIV epidemic in a specific region. These obligations of the States were confirmed in the decisions of the high-level meeting of the UN General Assembly on the fight against AIDS, held in New York on 8-10 June 2016. In the light of the need in changes, the new WHO, UNAIDS strategy has committed to stop the AIDS epidemic by 2030 as one of the sustainable development goals. The WHO, UNAIDS strategy for 2016-2021 calls for action according to which:

- by 2020, 90% of people living with HIV will know about their HIV status;

-by 2020, 90% of all patients diagnosed with HIV infection will be provided with antiretroviral therapy;

- by 2020, 90% of all patients receiving antiretroviral therapy will achieve a suppressed viral load [1].

In Kazakhstan, as of January 1, 2020, 36,589 cases of HIV infection were detected, total number of PLHIV - 24,794 people, and the prevalence rate per 100,000 population - 134.8. The highest numbers of PLHIV were registered in Pavlodar, Karaganda, Kostanay regions, in Nur-Sultan and Almaty cities. The International Bank for Reconstruction and development (2015), states that the epidemic caused by HIV-infection in the country is still at a "concentrated" stage, at which the most of new cases of HIV infection is registered among people who use injecting drugs (IDU), men who have sex with men, prisoners, sex workers (SW) and their clients [2]. It is predicted that the share of IDU and MSM in the coming years, in case of maintenance of the current trends in the epidemiological situation in Kazakhstan, will be 67% of

all new cases of HIV infection. In this connection, timely detection of infection and implementation of the methods recommended by WHO and UNAIDS for the prevention, diagnosis and treatment of HIV/AIDS is the main priority direction in the process of implementation of the measures on response to and prevention of the epidemic caused by HIV-infection in Kazakhstan.

Consolidated guideline on HIV infection in key populations: prevention, diagnosis, treatment and care. July 2014 (2015); Work flow chart for HIV prevention in the Republic of Kazakhstan for 2017-2020, taking into account the UNAIDS strategy approved by order of the Ministry of health of the Republic of Kazakhstan No. 164 dated April 14, 2017; materials of the working session "Improvement of HIV/STD testing algorithms in the Republic of Kazakhstan" (2019); collection of the examples of the best practices in public health services in the field of response to and prevention of HIV infection in the WHO European region (2018), new updated WHO, UNEADS documents: Guidelines for self-testing for HIV and informing of partners. December 2016 (2017); updated guidelines on testing for HIV" (2018) [1,2-7], numerous foreign and domestic scientific studies on the problem of implementation of the procedure of rapid testing for HIV infection [8-12] have become a kind of methodological guidelines, informational scientific materials that aim public health professionals to successful making of efforts in the field of organization of preventive measures in case of HIV/AIDS, including rendering of services on rapid testing for HIV among key populations. Published materials of WHO UNAIDS state the need in implementation of the methodology on rapid testing for HIV-infection in Kazakhstan among key populations, non-governmental organizations, and local communities. In the opinion of the world's leading scientists[13,14] it is recognised that rapid testing effectively provides timely access to the necessary information about HIV, routes and prevention measures, as well as treatment and social support, since the knowledge by the key populations of their HIV status is the main component of successful prevention of this infection [15,16]. The authors note that modern rapid blood and saliva tests have high sensitivity and specificity, do not require laboratory equipment, can be performed without need in clinical conditions, and fully meet the modern WHO requirements.

Despite the fact that the implementation of the ideology of rapid testing for HIV infection in the country is an urgent problem of the public health in Kazakhstan, many issues that are connected with rendering of rapid testing services for the key populations have not been sufficiently studied. Thus, primary health care (PHC) institutions are not yet sufficiently integrated into the testing program.

**Objective of the study.** To justify scientifically the approaches on the integration of the primary health care and the Service for AIDS prevention and control when rendering services on rapid testing for HIV-infection among key populations.

**Materials & methods.** As the materials of this comprehensive study, we used the results of numerous summarizing works of world-class specialists who are engaged in successful implementation of rapid testing methods in national health systems. In all cases, we were guided by the WHO and UNAIDS recommendation on rapid testing for HIV-infection.

The basic materials that represent this complex work are:

- archival (historical) epidemiological and laboratory data on HIV infection for 1987-2018.;
- results of epidemiological surveillance (ES) of HIV infection among key populations in Kazakhstan for 2014-2018;
- results of validation assessment of quality parameters used in the study of 5 types of rapid blood tests;
- materials of analytical study of the current legislative and normative legal documents regulating rapid testing for HIV infection in Kazakhstan;
- results of a 2-stage sociological study that revealed stigma and discrimination among key populations. In total, 478 respondents were surveyed;
- results of retrospective and prospective analyses of the organization of rapid testing implementation in Kazakhstan among key populations for 2014-2018.;
- results on development of a model of social support for key populations based on NGOs.

When interpreting the epidemiological analysis of the incidence of HIV infection, we used the prevalence indices (prevalence), incidence indices (incidence), recommended by the WHO Committee of experts [17]. Qualitative analysis was used in sociological studies.

The result of the comprehensive study of the possibility of the implementation of rapid testing for HIV infection in Kazakhstan was creation of an integrated model of primary health care and the service for AIDS prevention and control acceptable for the country, in case of rendering of services on rapid testing for HIV infection to key populations.

When forming the idea, strategy, and design of this study, we were guided by the principles of the methodology of scientific research in medicine and healthcare of E. De Puy and L.N. Gitlin (2017) [18]. Statistical analysis of the study results was performed using the Epi info program, version 6.

**Results and discussion.** Strategic steps on integration of the services with PHC in respect of HIV infection in Kazakhstan were made in accordance with the strategy "Kazakhstan: a new political policy of the established state" (2013) [19]. According to this strategy, within the scope of the long-term modernization of the national health system, it is planned to implement the unified standards of the quality of medical services. In the future, after the adoption of the State program of health care system development «Денсаулық» /"Densaulyk"/ for 2016-2019, the integration of medical services in connection with HIV/AIDS became to develop with a focus on primary health care.

The methodological basis for integration of the preventive measures in case of HIV-infection with PHC was WHO / UNAIDS strategy "90-90-90", in which it is stated that for effective reaction to and prevention of the spread of HIV infection among key populations, it is recommended an integrated set of measures that includes the preventive measures, in particular, rapid testing, treatment and care connected with HIV-infection. WHO emphasizes those services on the integrated set of measures should be: 1) available; 2) acceptable; 3) inexpensive; 4) fair. In addition, WHO recommends to take measures on integration of the services on HIV-infection prevention and treatment among key populations within the scope of relevant specialist services, such as the TB service, the maternal and child health service, the sexual and reproductive health service, and the drug addiction treatment service. The process of integration of PHC institutions into the service for AIDS prevention and control is developed in the works of domestic authors [20-24]. At the same time, it is noted that the development of PHC should be based on three principles: accessibility; universality; social orientation – at the expense of integration of PHC work, social protection and public health services, and active involvement of primary health care professionals in the framework of intersectoral interaction on public health protection [21]. However, Zh.K. Ismailov et al. (2015) notes that the integration of PHC and vertical specialist services (tuberculosis, Oncology, HIV/AIDS, etc.) remains as before insufficient [22]. The authors state that it is necessary to solve the issues of improving the continuity between outpatient-polyclinic and inpatient levels, and the overuse of consulting and diagnostic services persists. The potential of polyclinics and hospitals is not used enough for this purpose, what causes dissatisfaction of the population in the availability and quality of medical services.

Based on the results of the study performed within the scope of the PhD programme, based on the WHO, UNAIDS recommendations, works [20-24,25], the updated orders of the RK Ministry of Health (order of the RK Ministry of Health d/d 04.05.2019, No. KR DSM-2; order of the RK Ministry of Health № KR DSM-128; d/d 27.09.2019; Annex to the order of the RK Ministry of Health d/d May 4, 2019, No KR DSM-62) we prepared the algorithm for the integration model of primary health care and the service for AIDS prevention and control. The integration should be understood to mean: establishing a comprehensive and continuous primary Health care that shall take into account the needs of HIV-positive patients, including patients from key populations, and that shall be based on a patient-oriented approach. Based on the objectives of this work, the key groups (IDU, SW, MSM) are important components of the integrated primary health care in the framework of the system of reaction to and prevention of the epidemic caused by HIV-infection in Kazakhstan. This approach makes it possible to detect HIV infection among key populations at an early stage, ensure timely treatment initiation, and prevent new cases at the expense of treatment and change of patient's behavior. In our opinion, services on rapid testing for HIV infection should be low-threshold, provided free of charge with minimal requirements for the client. It is obviously, that the services to key groups should be accompanied by information campaigns in order to inform the population about the availability of the procedure of rapid testing for HIV infection and the possibility to know easily and quickly about his or her HIV status.

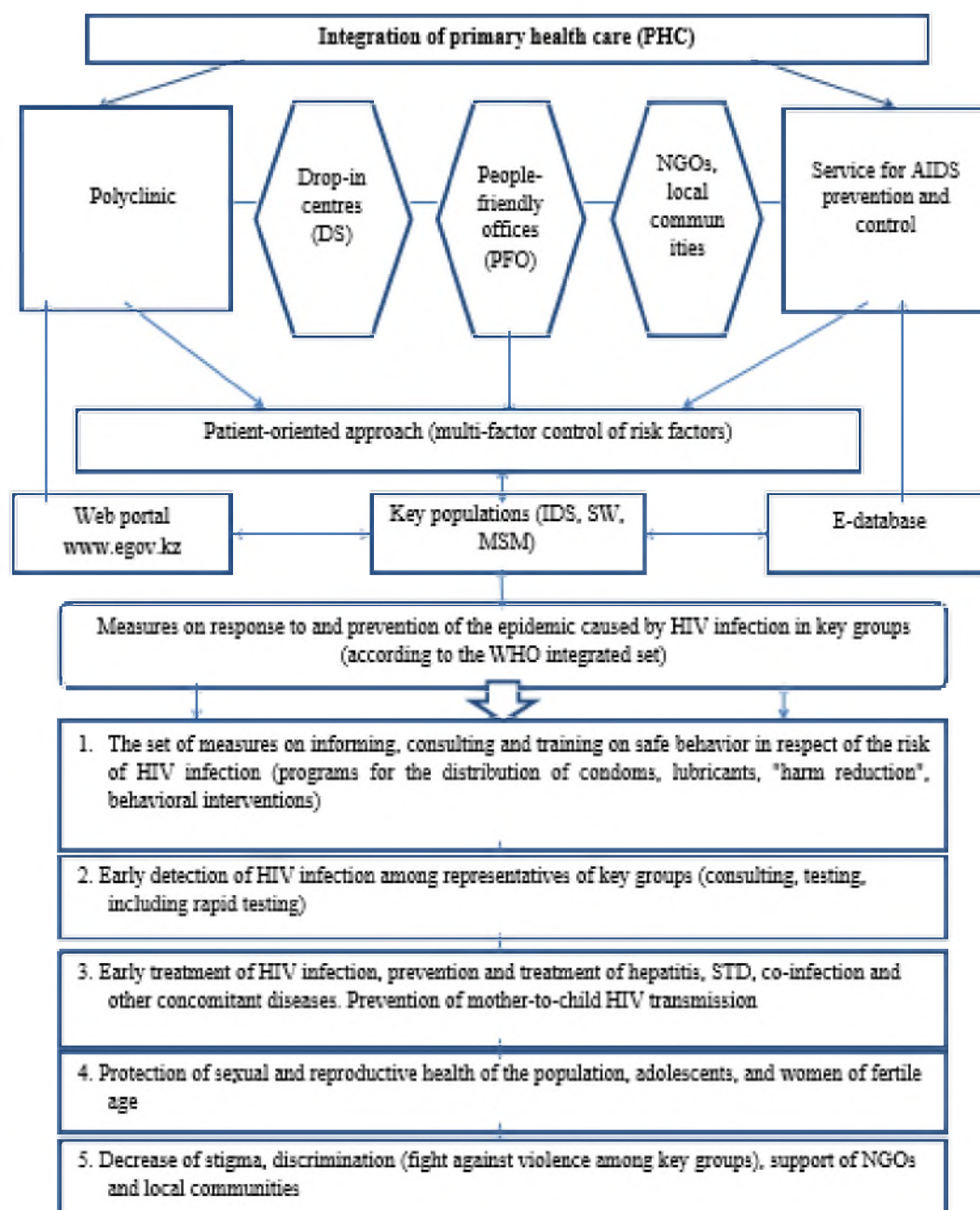


Figure 1 - Algorithm for the integration model of primary health care and the service for AIDS prevention and control

In accordance with this approach, when the key groups are assigned an epidemiologically proven and important role, the following justification is proposed for the integration of PHC institutions and the service for AIDS prevention and control:

1. WHO, UNAIDS recommendation: in terms of its focus the integrated care among key populations in respect of HIV infection should be directed towards health care institutions (primary polyclinics, relevant medical specialized organizations).

2. Positive results of organizing and conducting rapid testing for HIV infection among IDU, SW, MSM, pregnant women, teenagers, and the General population, performed at the medical cluster (AIDS Centers, medical institutions, including clinics) in 16 regions of Kazakhstan during the period of 2014-2018.

3. The presence of the relevant medical organizations in the structure of the integration with PHC that allow to provide to the key groups a wider range of services (the ability to redirect a HIV-positive patient

to specialized medical organizations, conduct high-quality diagnostics, treatment of Hepatitis C virus (HCV), STD, tuberculosis, and drug addiction).

4. Integration with PHC complies with WHO, UNAIDS recommendations: "Treatment of HIV infection-prevention of the epidemic caused by HIV-infection". In the process of the integration the important principle "The strategy of medical care for HIV-infected people is a cascade of treatment" shall be followed, which shall be used for PLHIV, starting from primary diagnosis up to achievement of viral suppression.

Figure 1 shows an algorithm for integration of the primary health care and the service for AIDS prevention and control.

5. Decrease of stigma, discrimination (fight against violence among representatives of key groups). Support and empowerment of NGOs and local communities.

Figure 1 shows that as a result of the integration of PHC institutions and the service for AIDS prevention and control, rendering of comprehensive services will be available to the key groups, including rapid testing, treatment and prevention of HIV infection, hepatitis, and STD.

The organization of integrated measures on HIV / AIDS for key populations, in accordance with the standard of the state service "Voluntary, anonymous and mandatory confidential medical examination" is carried out on an anonymous and confidential basis with the assignment of a unique identification code to each examined person. At this, the activities of the PHC organization in respect of the key populations shall be developed at the place of residence or registration, taking into account the selection of the medical organization.

Rapid testing for HIV, hepatitis, STD is organized and held in the drop-in centres, people-friendly offices and non-governmental organizations that shall provide preventive care and prior- and post-test consulting to the key groups. It should be noted that the integration of PHC and the service for AIDS prevention and control allows for the key groups (IDU, SW, MSM) to receive informational and educational materials, hold a mini-session, discuss the issues connected with HIV infection, Hepatitis virus, STD, behaviors that reduce the risk of infection and receive the reliable information about the need in compliance to ARV therapy.

An important role in the system of integration with PHC is assigned to the patient-oriented approach. We shall note that modern preventive approaches are based on the concept of multi-factor risks. For key populations, in addition to HIV infection, hepatitis, and STD, it is also important to identify other risk factors, such as cardiovascular diseases, cancer, tuberculosis, and diabetes melitus. It is believed that multi-factor control of risk factors can, according to L. Sylla et al (2007), A. I. Vyalkov et al. (2016), ensure an integral effect of decrease of the incidence of the diseases with nosological factors listed above [26, 27].

It is known that primary health care includes three types of care: pre-medical service, qualified medical care, and health and social care that is provided by social workers and psychologists.

The list of the main key components that characterize the model of the integration of PHC and the service for AIDS prevention and control and its continuity is given below:

1. The integration of primary health care in case of HIV infection among key populations is carried out within the scope of the statutory free medical assistance (SFMA) and the compulsory social health insurance system (CHIS).

2. In primary health care institutions and obstetrics services, integration with the service for AIDS prevention and control makes it possible to organize administering medical aid and conduct rapid testing for HIV-infection of pregnant women, including PLHIV and children born by HIV-positive mothers.

3. Integration with PHC enables the service for AIDS prevention and control to take joint HIV/AIDS prevention measures in emergency situations (purchase of rapid tests, ART drugs for carrying out activities in case of emergency situation, etc.).

4. Rapid testing, pre-and post-test consulting for HIV infection, hepatitis, and STD of key populations when integrating with PHC is carried out in drop-in centres, people-friendly offices, NGOs with the involvement of social workers and outreach workers.

5. The integrated activities foresee the program of social support that shall provide access both to medical and psychosocial support services for the key populations.

6. Integration with PHC for HIV/AIDS prevention among the population, including key groups, is provided by specialists of the service for AIDS prevention and control, PHC in collaboration with non-governmental organizations, local communities and public and private relevant organizations.

7. Enhancement of outpatient care for key populations is ensured in cooperation with outpatient-polyclinic, inpatient, palliative and relevant specialized organizations based on the clinical Protocol, in the following specializations: infectious diseases (adult, pediatric), Pediatrics, dermatovenerology, obstetrics, gynecology, Phthisiology, surgery, therapy, Oncology, narcology.

At the present stage, it is important to develop effective methods for evaluation of the integrated programs. Both the overall results (for example, the number and the quantity of services provided to key populations) and specific epidemiological indices (incidence of a disease, mortality, frequency of detection of HIV infection, hepatitis, STD using rapid test method, the degree of testing coverage) are evaluated at this.

We believe that for effective monitoring and evaluation of the effectiveness of individual HIV/AIDS prevention measures for each population of key groups (IDS, SW, MSM), it is reasonable and advisable to develop a system of target indicators in the future. This will allow to evaluate purposefully the preventive measures, monitor the deviations and the results of the implementation of the services provided to key populations.

**Conclusion.** Integration of the primary health care and the service for AIDS prevention and control opens up additional possibilities for the key populations in Kazakhstan for identification of new cases, treatment and prevention of HIV infection, hepatitis, and STD under the control and monitoring of medical specialists. As part of this approach, the following is important: voluntary, anonymous and / or confidential examinations with the help of free of charge rapid testing, as well as free of charge consulting and treatment of the key populations.

#### **Ethical Approval**

This study is approved by the Local Ethics Committee of the Kazakhstan medical University "Higher school of public health" (Protocol No. IRB-A086 dated 29.09.2017).

#### **Conflicts of Interest**

The authors declare that there are no conflicts of interest regarding the publication of this paper.

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### **ҚАЗАҚСТАН ХАЛҚЫНЫҢ НЕГІЗГІ ТОПТАРЫ АРАСЫНДА АИТВ-ИНФЕКЦИЯСЫНА ЭКСПРЕСС-ТЕСТІЛЕУДІҢ ИНТЕГРАЦИЯЛАНҒАН МОДЕЛІН ЕНГІЗУДІҢ ҒЫЛЫМИ НЕГІЗДЕМЕСІ**

**Аннотация.** Мәселенің өзектілігі Қазақстан халқының негізгі топтары арасында АИТВ-инфекциясының таралуына негізделген, ол топқа инъекциялық есірткі қолданатындар (ЕК), жыныс қызметкерлері (ЖҚ), ер адаммен жыныстық қатынасқа түсетін ер адам (ЕЖЕ), трансгендер және сотталғандар жатады.

Экспресс-әдістерді пайдалана арқылы АИТВ-инфекциясын уақтылы анықтау елдегі АИТВ-инфекция індетіне қарсы тұратын жүйенің басым бағыты болып саналады.

Зерттеудің мақсаты – халықтың негізгі топтары арасында экспресс-тестілеу қызметтерін ұсыну барысында бастапқы медициналық-санитарлық көмек пен ЖИТС-тың алдын алу және оған қарсы күрес жөніндегі қызметті интеграциялау жөніндегі тәсілдерді ғылыми негіздеу.

Материалдар мен әдістер. Жұмыста тарихи, аналитикалық, эпидемиологиялық, зертханалық, социологиялық, статистикалық әдістер қолданылды. АИТВ-инфекциясына экспресс-тестілеу рәсімі саласындағы әлемнің үздік тәжірибелері талданды. 2030 жылға қарай АИТВ-инфекциясы індетінің таралуын тоқтату жөніндегі жаһандық мақсатты енгізуді ескере отырып, 31 жылдық кезеңдегі Қазақстандағы эпидемиялық үдерістің серпініне бағалау жұмыстары жүргізілді. Үкіметтік емес ұйымдарда АИТВ-инфекциясын тестілеуге байланысты құқықтық және әлеуметтік мәселелер зерделенді. Қазақстанда тіркелген

5 АИТВ-инфекциясына қан бойынша экспресс-тесттің сапа параметрлеріне валидациялық бағалау жұмыстары жүргізілді. Ретроспективті, проспективті талдауларды пайдалана отырып, 2014-2018 жылдары қан мен сілекей бойынша экспресс-тестілерді қолдану арқылы халықтың негізгі топтары (ИЕТ, СЖ, ЕЖЕ) арасында АИТВ-инфекциясына жүргізілген экспресс-тестілеудің нәтижелері бағаланды.

Қазақстанның денсаулық сақтау жүйесіне экспресс-тестілеуді енгізу мүмкіндігін зерделеу бойынша кешенді зерттеулердің қорытындысы халықтың негізгі топтары арасында АИТВ-инфекциясына, гепатиттерге, ЖЖБИ-ге экспресс-тестілеу қызметтерін ұсыну кезінде алғашқы медициналық-санитариялық көмекті (бұдан әрі – АМСК) және ЖИТС-тың алдын алу және оған қарсы күрес жөніндегі қызметті ықпалдастырудың ғылыми негіздемесі болып саналады.

Нәтижелер мен талқылаулар. ДДҰ, ЮНЭЙДС «90-90-90» стратегиясы АИТВ-инфекциясы кезіндегі іс-шараларды АМСК-пен ықпалдастырудың әдіснамалық негізі болып есептеледі, онда халықтың негізгі топтары арасында АИТВ-инфекциясының таралуына тиімді қарсы тұру үшін АИТВ-инфекциясына байланысты диагностика, емдеу мен күтімді қамтитын кешенді шаралар пакетін енгізу ұсынылады. Халықтың негізгі топтары арасында бастапқы медициналық-санитариялық көмекті ықпалдастыру тегін медициналық көмектің кепілдік берілген мөлшері (ТМККК) және міндетті медициналық сақтандыру жүйесі (МӨМС) шеңберінде жүргізілетіні атап өтілді. АМСК-пен ықпалдасу кезінде халықтың негізгі топтарының АИТВ-инфекциясына, гепатиттеріне дейінгі және одан кейінгі тестілік консультация беру, ЖЖБИ-ге экспресс-тестілеу медициналық ұйымдарда, емханаларда, сенім пункттерінде (СП), достық кабинеттерде (ДК), ҰЕҰ-да әлеуметтік қызметкерлер мен аутич-қызметкерлерді тарта отырып жүргізіледі. Интеграцияланған іс-шаралар халықтың негізгі топтарының медициналық және психоәлеуметтік қолдау қызметтеріне қолжетімділігін жақсартуды қамтамасыз ететін әлеуметтік сүйемелдеуді көздейді.

Қорытынды. Алғашқы медициналық-санитариялық көмек пен ЖИТС-тың алдын алу және оған қарсы күрес жөніндегі қызмет интеграциясы медицина мамандарының бақылау және мониторингі арқылы жаңа жағдайды анықтау, АИТВ-инфекциясын, гепатиттерді, ЖЖБИ емдеу және алдын алу кезінде Қазақстан халқының негізгі топтарына қосымша мүмкіндіктер ашады.

Мұндай тәсіл шеңберінде ерікті, жасырын және (немесе) құпия тексеру, оның ішінде халықтың негізгі топтарын тегін негізде экспресс-тестілеу маңызды мәнге ие. Жұмыста халықтың негізгі топтары арасында экспресс-тестілеу қызметін ұсыну кезінде бастапқы медициналық-санитарлық көмек пен ЖИТС-тың алдын алу және оған қарсы күрес жөніндегі қызметті интеграциялау жөніндегі тәсілдерді ғылыми негіздеген.

**Түйін сөздер:** интеграция, алғашқы медициналық-санитариялық көмек, ЖИТС-тың алдын алу және оған қарсы күрес қызметі, негізгі топтар, АИТВ-ға экспресс-тестілеу.

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## **НАУЧНОЕ ОБОСНОВАНИЕ ВНЕДРЕНИЯ ИНТЕГРИРОВАННОЙ МОДЕЛИ ЭКСПРЕСС-ТЕСТИРОВАНИЯ НА ВИЧ-ИНФЕКЦИЮ СРЕДИ КЛЮЧЕВЫХ ГРУПП НАСЕЛЕНИЯ КАЗАХСТАНА**

**Аннотация.** Актуальность проблемы обусловлена распространением ВИЧ-инфекции среди ключевых групп населения Казахстана, к которым относятся люди, употребляющие инъекционные наркотики (ЛУИН), работники секса (РС), мужчины имеющие секс с мужчинами (МСМ), трансгендеры, осужденные.

Своевременное выявление ВИЧ-инфекции с использованием экспресс-методов является приоритетным направлением системы противодействия эпидемии ВИЧ-инфекции в стране.

**Цель исследования:** научно обосновать подходы по интеграции первичной медико-санитарной помощи и службы по профилактике и борьбе со СПИД при предоставлении услуг по экспресс-тестированию среди ключевых групп населения.

**Материалы и методы.** В работе использовались исторические, аналитические, эпидемиологические, лабораторные, социологические, статистические методы. Проанализированы лучшие практики мира в сфере процедуры экспресс-тестирования на ВИЧ-инфекцию. Проведена оценка динамики эпидемического процесса в Казахстане за 31-летний период с учетом внедрения Глобальных целей по прекращению распространения эпидемии ВИЧ-инфекции к 2030 году. Изучены правовые и социальные проблемы, связанные с тестированием на ВИЧ-инфекцию в неправительственных организациях. Проведена валидационная оценка параметров качества 5 зарегистрированных в Казахстане экспресс-тестов на ВИЧ-инфекцию по крови. С использованием ретроспективного, проспективного анализов оценены результаты проведенного экспресс-тестирования на ВИЧ-инфекцию среди ключевых групп населения (ЛУИН, РС, МСМ) с применением экспресс-тестов по крови и слюне за 2014-2018 годы.

Итогом комплексных исследований по изучению возможности внедрения экспресс-тестирования в систему здравоохранения Казахстана явилось научное обоснование интеграции первичной медико-санитарной помощи (далее ПМСП) и службы по профилактике и борьбе со СПИД при предоставлении услуг по экспресс-тестированию на ВИЧ-инфекцию, гепатиты, ИППП среди ключевых групп населения.

**Результаты и обсуждения.** Методологической основой интеграции мероприятий при ВИЧ-инфекции с ПМСП явилась стратегия ВОЗ, ЮНЭЙДС «90-90-90», в которой отмечено, что для эффективного противодействия распространению ВИЧ-инфекции среди ключевых групп населения рекомендуется внедрять комплексный пакет мер, включающий диагностику, лечение и уход в связи с ВИЧ-инфекцией. Отмечено, что интеграция первичной медико-санитарной помощи среди ключевых групп населения проводится в рамках гарантированного объема бесплатной медицинской помощи (ГОБМП) и системы обязательного медицинского страхования (ОСМС). Экспресс-тестирование, до- и после-тестовое консультирование на ВИЧ-инфекцию, гепатиты, ИППП ключевых групп населения при интеграции с ПМСП проводятся в медицинских организациях, в поликлиниках, пунктах доверия (ПД), дружественных кабинетах (ДК), НПО с привлечением социальных работников и аутрич-работников. Интегрированные мероприятия предусматривают социальное сопровождение, обеспечивающее улучшение доступа ключевых групп населения как к медицинским, так и услугами психосоциальной поддержки.

**Вывод.** Интеграция первичной медико-санитарной помощи и службы по профилактике и борьбе со СПИД открывает дополнительные возможности для ключевых групп населения Казахстана при выявлении новых случаев, лечения и профилактики ВИЧ-инфекции, гепатитов, ИППП под контролем и мониторингом медицинских специалистов.

В рамках такого подхода важное значение имеет добровольное, анонимное и (или) конфиденциальное обследование, в том числе экспресс-тестирование ключевых групп населения на бесплатной основе.

**Ключевые слова:** интеграция, первичная медико-санитарная помощь, служба по профилактике и борьбе со СПИД, ключевые группы, экспресс-тестирование на ВИЧ.

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