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### STUDY OF THE BARRIERS TO THE INTRODUCTION OF KAZAKHSTAN NONGOVERNMENTAL ORGANIZATIONS-BASED RAPID HIV TESTING

Abstract. This article presents the results of a conducted sociological study aimed at defining the barriers that interfere with the introduction of rapid HIV testing among nongovernmental organizations in Kazakhstan. According to the questionnaire-based survey and interviewing of a group of 478 persons, representatives of people living with HIV (PLHIV), clients of HIV prevention programs, visitors of "drop-in centers", "friendly rooms", employees and specialists of AIDS centers, NGOs (nongovernmental organizations), experts, coordinators of medical organizations, it has been established that the conditions of HIV-related medical examinations and consultations, including rapid methods, carried out in Kazakhstan are subject to the applicable legislation of the Republic of Kazakhstan and the orders of the Ministry of Healthcare of the Republic of Kazakhstan. At the same time, it should be noted that there are some barriers that interfere with NGO-based rapid HIV testing and are notable for their social and legislative nature. These are stigma and discrimination from the public and "self-stigmatization" of people living with HIV (PLHIV); misunderstanding of one's own HIV infection; a lack of communication between medical/social workers and patients; the absence of licenses for HIV testing and counseling among nongovernmental organizations. In order to effectively involve key Kazakhstan population groups (PUIDs (people who use injectable drugs), SWs (sex workers), MSM (men who have sex with men)) in the program and procedure of rapid testing and counseling, it is necessary to make amendments to the country's existing legislative and legal acts for the purpose of providing a social and legal protection mechanism for those under examination.

Key words: HIV infection, rapid tests, nongovernmental organizations, barriers, stigma, discrimination.

Importance of the Problem. The Message of the President of the Republic of Kazakhstan, Leader of the Nation, N. A. Nazarbayev, dated November 12, 2014, "The Kazakhstan's way – 2050: Common aim, common interests, common future", states that the activities associated with providing high-quality and affordable medical services for population health improvement shall become main issues for the state's health policy [1].

One of the directions of the "Nation Plan, 100 precise steps to implement the five institutional reforms" is to introduce advanced medical care standards and develop primary care services that shall be a central link of the national healthcare sector for the prevention and early control of diseases [2].

All these directions are also relevant to the sphere of services rendered to "key" population groups that are vulnerable to HIV infection and AIDS.

At the present stage, HIV infection is one of the most important medical problems as it results in large-scale social, medical, demographic, economic consequences requiring decisive and immediate measures from the state.

According to the social data of the Republican Center on Prevention and Control of AIDS, as of January 1, 2018, 32,573 cases of HIV were cumulatively diagnosed in Kazakhstan.In total, people living with HIV (PLHIV) are 20,841 persons, the prevalence of PLHIV per 100,000 people amounts to 117.7.

HIV infection is most intensively distributed among "key" population groups. According to the WHO, the term "key population groups" is used to identify groups of people who are, irrespective of HIV/AIDS epidemic types and local levels, subject to an increased risk of HIV infection due to their behavior [3]. These are people who use injectable drugs (PUIDs), sex workers (SWs), men who have sex with men (MSM), prisoners, transgender people and others. In this regard, the timely detection of HIV infection, the introduction of new and improvement of existing diagnostic methods are main directions for the HIV/AIDS counteraction system in Kazakhstan. Within this framework, for the purpose of extending the volume of HIV testing among representatives of "key" and vulnerable population groups in Kazakhstan, the attempts to introduce NGO-based rapid HIV testing among these population groups are being made. Let us note that today the Joint United Nations Programme on HIV/AIDS (UNAIDS) recommends an absolutely new 90-90-90 strategy designed to counteract the HIV/AIDS epidemic. According to this promising strategy aimed at ending the AIDS epidemic in the world, by 2020 90% of people living with HIV will be aware of their HIV status, 90% of patients diagnosedwith HIV will be provided with antiretroviral therapy, 90% of patients who receive antiretroviral therapy will have their viral load suppressed.

The purpose of this message is to study the barriers that interfere with the introduction of NGO-based rapid HIV testing in Kazakhstan.

Materials and Methods. The study was conducted by the specialists from the Republican Center on Prevention and Control of AIDS and Kazakhstan's Medical University "KSPH" on the base of the Kazakhstani Union of People Living with HIV, a nongovernmental organization.

The period of this study was 2015-2018. The work included such methods as content analysis, SWOT analysis, sociological and statistical methods.

Earlier, we preliminarily studied the diagnostic characteristics of rapid tests used for HIV diagnosis in Kazakhstan [5]. We noted that today there are 5 licensed rapid HIV diagnosis test systems that effectively function in the republic and completely meet the WHO's modern requirements (sensitivity > 99%, specificity > 98%). These are AlereDetermine<sup>TM</sup> HIV ½ Ag Ab Combo; Hexagon HIV 1+2; Abon HIV 1/2; HIV 1,2 Han Medtest; Geenius HIV 1/2 Confirmatory. When assessing the qualitative parameters of rapid tests, we used the methods specified by the WHO for similar studies [6].

The field studies of the barriers that interfere with the introduction of NGO-, community-based rapid HIV testing were conducted in the following regional centers of Kazakhstan: Pavlodar, Kostanay, Ust-Kamenogorsk, Karaganda, Temirtau, Shymkent, Kyzylorda, Taraz, Almaty, Uralsk, Atyrau.

The following NGOs were involved in the study: "Ty ne odin", "Gerlita" (Pavlodar), "Kuat", "Answer" (Ust-Kamenogorsk), "Kuat" (Shymkent), "Shapagat" (Karaganda), "Pomotsch" (Kostanay).

The following assessment instruments were developed in order to collect information as per the WHO's methods: 1) questionnaires for patients of the AIDS centers; 2) questionnaires for clients of the HIV prevention program ("drop-in centers", "friendly rooms"); 3) questionnaires for activists, employees of the NGOs; 4) questionnaires for interviewing experts, specialists of the AIDS centers, NGOs, state medical institutions; 5) informed consent forms for the study's participants.

The sociological studies consisted of 2 stages:

- 1) The first stage (October-November 2015) was as follows: PLHIV 12 persons; clients of the prevention programs 141 persons; experts, coordinators, employees of the AIDS centers, NGOs 32 persons; focus groups with clients of the prevention programs 2 groups of 12-13 people each, participants of the focus group were among the respondents. In total, 185 people were interviewed.
- 2) The second stage (April-May 2018) was as follows: PLHIV 110 persons; clients of the prevention programs 140 persons; employees, activists of the NGOs 18 persons; experts, coordinators, employees of the AIDS centers, NGOs 25 persons. In total, 293 people were interviewed. Total: 478 people were covered by the sociological study.

The analysis of the results of the anonymous questionnaire survey included the following: statistical processing of the questionnaires (coding and analysis of the respondents' answers), content analysis of the focus group's results, interpretation, discussion and conclusions.

The work also analyzed the legislative and regulatory legal acts of the RoK that govern the procedure of NGO-based rapid HIV testing in the Republic of Kazakhstan. Special attention was paid to the orders of the Ministry of Healthcare of the RoK that establish the conditions of HIV infection-related medical examination and consultation, including those with the use of rapid methods:

- 1. Order No. 246 dated April 22, 2015, of the MoH of the RoK, "On the Approval of the Rules of Voluntary Anonymous and (or) Confidential Medical Examination and Consultation Concerning HIV Infection for Citizens and Oralmans(ethnic Kazakhs who have immigrated to Kazakhstan) on a Paid Basis";
- 2. Order No. 508 dated June 23, 2015, of the MoH of the RoK, "On the Approval of the Rules of Obligatory Confidential Medical Examination for HIV Infection According to Clinical Indications";
- 3. Order No. 115 dated February 28, 2013, of the MoH of the RoK, "On the Introduction of Amendments to Order No. 228 dated March 09, 2004, of the MoH of the RoK" on the Adoption of the Regulations on Organization of Activities of Drop-In Centers for People Using Injectable Drugs".

The statistical analysis of the study results was carried out with the use of standard biostatistics methods [8] and the SPSS program (Statistical Package for Social Science).

Results and Discussion. When analyzing the study results, we were first of all guided by the existing international experience in this problem, the best international practices of many countries where it has been convincingly established that inexpensive rapid HIV tests allowing health workers to carry out clinic-, NGO-, community-based testing under field conditions [9-13] are already introduced into medical practices. So, according to J. Wilton (2015), L. Broeckaert and L. Challacombe (2015), rapid testing with the use of blood and gingival tests is the first and most important step in the treatment of HIV-infected patients [14, 15]. Based on the representative materials of Canada, the authors used the method of literature review and presented a wide range of evidence in favor of the advantages of rapid HIV testing. Also, other works [16,17] indicate the high effectiveness and quality of rapid tests, which is especially important for our country in the context of introduction of rapid HIV testing methods.

The study results show that the conditions of medical examination for HIV-infection by Kazakhstan NGO-based rapid methods are governed by the applicable legislation and regulations. These are the above 3 orders of the MoHof the RoK (Orders No. 508 dated June 23, 2015, No. 115 dated February 28, 2013, and No. 246 dated April 22, 2015) where centers on prevention and control of AIDS are authorized bodies specialized in carrying out HIV examinations. At the same time, HIV examinations carried out in private organizations are governed by Law No. 202-V dated May 16, 2014, of the RoK, "On Permits and Notices". According to this law, all legal entities or natural persons, including nongovernmental and public organizations licensed for HIV diagnosis, are entitled to carry out examinations by any methods as the law states no restrictions in relation to diagnostic methods and materials. This means that all rapid tests, both blood and saliva ones, can be used in NGOs' activities if there are corresponding licenses and are properly governed by all the regulatory and legal documents of the RoK.

In our opinion, a way out of this situation is to obtain licenses for NGO-based rapid HIV testing and related medical activities or make amendments to existing regulatory documents that govern this procedure.

The sociological studies conducted by us reveal the different barriers that interfere with the introduction of Kazakhstan NGO-based rapid HIV testing and are notable for their social, individual, structural and systematic nature. The barriers of social nature are of special interest. They are:

- stigma and discrimination from the public and "self-stigmatization" of PLHIV;
- "misunderstanding" of one's own HIV infection;
- poor communication between medical/social workers and patients;
- shortage of state funds for HIV/AIDS prevention programs;
- unstable monetary support for NGOs.

For the purpose of introducing Kazakhstan NGO-based rapid HIV testing, we recommend the following:

- Nongovernmental organizations (NGOs) that have financial and technical resources shall obtain licenses for rapid HIV testing and related activities.
- Making amendments to regulatory documents: NGOs' articles of incorporation (for the purpose of governing organizations' activities): to Order No. 115 dated February 28, 2013, of the MoH of the RoK(for making amendments to the Regulations on organization of drop-in centers' activities in the context of rapid HIV testing); to the existing orders of the Ministry of Healthcare of the RoK (for the purpose of governing sanitary regulations and norms related to NGOs' premises, etc.
- Developing an algorithm for rapid HIV testing for different population groups with the conditions of Kazakhstan taken into consideration.
- Training medical and social workers in order to carry out high-quality HIV counseling among "key" population groups.

Conclusion. For the purpose of introducing the procedure of Kazakhstan NGO-based rapid HIV testing, it is necessary to develop a social and legal protection mechanism for those under examination. At the same time, in order to overcome the barriers that interfere with HIV testing among NGOs and communities, it is necessary to develop: a national plan aimed at decreasing stigma and counteracting discrimination, which includes results-oriented activities with the population, the medical community and NGOs.

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<sup>1</sup>«ҚДСЖМ» Қазақстандық медицина университеті, Алматы Қазақстан, <sup>3</sup>ЖИТС-тың алдын алу және оған қарсы күрес жөніндегі республикалық орталық, Алматы, Қазақстан, <sup>3</sup>Ауруларды бақылау орталығы, АҚШ

#### ҚАЗАҚСТАНДА ҮКІМЕТТІК ЕМЕС ҰЙЫМДАР БАЗАСЫНДА АИТВ-ҚА ЖЕДЕЛ -СЫНАҚТАМА ЕНГІЗУ ҮШІН КЕДЕРГІЛЕРДІ ЗЕРТТЕУ

Аннотация. Қазақстанның үкіметтік емес ұйымдары арасында АИТВ-ға экспресс-тестілеуді енгізуді көздейтін кедергілерді зерделеу бойынша жүргізілген әлеуметтік зерттеу нәтижелері берілген. Сауалнама және сұхбат жүргізу негізінде 478 адам, АИТВ-инфекциясымен (ТЖЗ) өмір сүретін адамдар өкілдері, "сенім пункттеріне", "Достық" кабинеттерге" баратын АИТВ-инфекциясының алдын алу бағдарлама клиенттері, ЖИТС орталықтарының ҮЕҰ қызметкерлері мен мамандарының, сарапшылардың, медициналық ұйымдардың кординаторларының Қазақстанда АИТВ-инфекциясы мәселелері бойынша медициналық тексеру және кеңес беру, оның ішінде АИТВ-инфекциясын алдын алу бойынша жедел медициналық тексеру жүргізу жағдайлары анықталды, Қазақстан Республикасының заңнамасына және Қазақстан Республикасы Денсаулық сақтау министрлігінің бұйрықтарына сәйкес реттеледі. Сонымен қатар, әлеуметтік және заңнамалықнормативтік сипаттағы үкіметтік емес ұйымдар базасында АИТВ-ға сараптама-тестілеуге кедергі келтіретін жағдайлар бар екені атап өтілді. Бұл-қоғам тарапынан да, АИТВ-мен (ӨТЗ) өмір сүретін адамдардың "өзінөзі көрсету" де стигма және кемсітушілік; АҚТҚ-ның жеке жұқтыруын түсінбеу феномены; медициналық, элеуметтік қызметкерлер мен пациенттердің коммуникациясының жеткіліксіз деңгейі; үкіметтік емес ұйымдарда АИТВ-ға кеңес беру және тестілеу жүргізуге арналған лицензияның болмауы. Қазақстан халқының негізгі топтарының (ЛУИН, РС, МСМ) өкілдерін бағдарламаға және экспресс-тестілеу мен консультация беру рәсіміне тиімді тарту үшін тексерілушілерді қорғаудың әлеуметтік-құқықтық тетігін қамтамасыз ету үшін елдің заңнамалық, құқықтық актілеріне өзгерістер енгізу қажет.

**Түйін сөздер:** ВИЧ-инфекциясы, жедел-сынақтама, үкіметтік емес ұйымдар,кедергілер,стигма, кемсітушіліктер.

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## ИСЛЕДОВАНИЕ БАРЬЕРОВ ДЛЯ ВНЕДРЕНИЯ ЭКСПРЕСС-ТЕСТИРОВАНИЯ НА ВИЧ НА БАЗЕ НЕПРАВИТЕЛЬСТВЕННЫХ ОРГАНИЗАЦИЙ В КАЗАХСТАНЕ

Аннотация. Представлены результаты проведенного социологического исследования по изучению барьеров, припятсвующие внедрению экспресс-тестирования на ВИЧ среди неправительственных организаций Казахстана. На основании анкетного опроса и интервьюирования 478 человек, представителей людей, живущих с ВИЧ-инфекцией (ЛЖВ), клиентов программ профилактики ВИЧ-инфекции, посещающие «пункты доверия», «дружественные» кабиенты», сотрудников и специалистов Центров СПИД, НПО, экспертов, кординаторов медицинских организаций было выявлено, что в Казахстане условия проведения медицинкого обследования и консультирования по вопросам ВИЧ-инфекции, в том числе экспресс-методами, регламентируются соответсвующими законодательствами Республики Казахстан и приказами Министерства здравоохранения Республики Казахстан. В то же время отмечено, что существуют барьеры препятсвующие эксперсс-тестированию на ВИЧ на базе неправительсвенных организаций, носящие социальный и закона-

дательно-нормативные характеры. Это – стигма и дискриминация, как со стороны общества, так и «самостигматизация» людей, живущих с ВИЧ (ЛЖВ); феномен неосознания собственного инфицирования ВИЧ; недостаточный уровень коммуникации медицинских, социальных работников и пациентов; отсуствие лицензии на проведение консультирования и тестирования на ВИЧ в неправительсвенных организациях. Для эффективного вовлечения представителей ключевых групп населения Казахстана (ЛУИНы, РС, МСМ) в программу и процедуру экспресс-тестирования и консультирования необходимо внести изменения в законодательные, правовые акты страны для обеспечения социально-правого механизма защиты обследуемых.

**Ключевые слова:** ВИЧ-инфекция, экспресс-тесты, неправительственные организации, барьеры, стигма, дискриминация.

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