



A Survey of Russian Doctors on HIV/AIDS

Ted Gerber, University of Wisconsin-Madison
Sarah Mendelson, Center for Strategic and International Studies¹
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Introduction

Russian doctors are on the front line of the struggle against HIV/AIDS in their country, where the epidemic has surged in recent years. As those responsible for diagnosing, treating, and counseling patients with HIV and AIDS, they have unique insight into the trajectory of the epidemic, the adequacy of current government policies designed to fight HIV/AIDS, unmet needs, and priorities. Their views -- about the effectiveness of anti-retroviral medications (ARVs) and other treatments, about whether all HIV and AIDS patients are equally deserving of treatment, and about the importance of confidentiality versus disclosure of HIV diagnoses -- affect the quality of care that Russians with HIV and AIDS receive. Doctors' perceptions of the personal risks they may face as a result of treating HIV infected patients can also influence their conduct.

Because doctors play such a pivotal role in the fight against HIV/AIDS, we need to understand how they perceive various issues related to the epidemic. In addition to understanding how their attitudes affect the standard of care, their experiences provide a different point of view on the question of how widespread the epidemic has become than that obtained from official statistics and pronouncements. Doctors also might serve as key target audience or a sympathetic constituency for various efforts on the part of Russia's government and nongovernmental organization to combat the spread of HIV and provide better treatment for those who have the virus. Alternatively, doctors might serve as an obstacle to such measures. Either way, information about their attitudes and practices can play a role in advancing public health in Russia, especially concerning HIV/AIDS.

To find out how this key group views an array of issues related to HIV/AIDS, we implemented a survey in summer 2005 of 1,208 Russian doctors, all of whom have treated HIV infected patients. This survey, to our knowledge the first of its kind, provides an unprecedented picture of doctors' attitudes regarding four broad topics: 1) the extent, relative importance, and meaning of the HIV/AIDS epidemic; 2) issues related to treatment, supply needs, and physician safety; 3) the relationship between doctor and HIV infected patients; and 4) possible courses of action.² In this preliminary report, we present the main findings with respect to each of these broad themes. Throughout we devote particular attention to two main sources of variation in the views of doctors -- regional prevalence of HIV and type of establishment -- but we also briefly discuss other sources of variation we identified based on multivariate statistical models that we report in the appendix. We conclude by offering some recommendations based on our findings.

Our major findings, developed in more detail below, are as follows:

- While most doctors surveyed see HIV/AIDS as a major, even "catastrophic" health threat in Russia, only 15 percent say it is Russia's most serious health problem.

² We are aware of only one other study on doctors' opinions on HIV in Russia. See Healthy Russia, "Russian Medical Providers HIV/AIDS Awareness, Attitudes, and Practices," (January 2005) based on twenty in-depth interviews of doctors and nurses who treat HIV infected patients but work outside the HIV clinics.

- Doctors have far more contact with HIV infected patients than with AIDS patients, and deaths from AIDS-related complications are rare.
- Doctors who do not work in AIDS centers lag significantly behind those who do work in AIDS centers in their training and knowledge concerning the treatment and management of HIV.
- Most doctors, within and outside AIDS centers, want more training on HIV/AIDS.
- Medical establishments regularly lack supplies that affect the safety of doctors and their patients.
- Many doctors associate HIV with Russia's moral/cultural decline, and some think certain groups of HIV patients should not receive government subsidized ARVs.
- Most doctors in our study want international assistance in combating HIV/AIDS to continue in Russia.
- Doctors widely believe that the Russian government does not spend enough on health care or on the fight against HIV/AIDS and that the government program on HIV/AIDS requires fundamental change.

Basic Sample Characteristics

We stratified the sample based on two criteria: regional prevalence of HIV and type of medical establishment. We suspected that the views of doctors vary systematically based on how prevalent HIV is in their region. Thus, we drew our sample in equal proportions from low prevalence (fewer than 60 registered cases of HIV per 100,000 population), medium prevalence (60 to 199 cases per 100,000), and high prevalence (200 or more cases) regions based on the regional data on officially registered cases from January 1, 1987 through January 31, 2005 compiled by the international NGO "AIDS Foundation East-West." Forty-nine of Russia's 89 oblasts were included in our study. In Russia, the vast majority of HIV infected patients receive treatment for the disease in federal, oblast, or local AIDS centers. Therefore, we were particularly eager to measure the views of the doctors who work in these centers, and to compare them to doctors who work in other types of medical establishments. For this purpose, we ensured that one third of the sample (404 respondents) consists of doctors who work in AIDS centers, whom we refer to as "AIDS center" doctors. The remaining 804 doctors in our sample work in other types of medical establishments: hospitals, clinics, dispensaries, but we refer to them in this report as "hospital" doctors.

We present key descriptive statistics for our sample in Table 1.³ Several aspects of the sample are noteworthy. Most strikingly, 82 percent of the AIDS center doctors report having received specialized training in the epidemiology, treatment, or prevention of AIDS, compared to 55 percent of the hospital doctors. While it is not surprising that AIDS center doctors are more likely to have had specialized training, these numbers show that one out of two hospital doctors who has treated patients with HIV has not had any specialized training. As we shall see, training is associated with significantly greater familiarity with and understanding of ARV therapies; therefore, one important recommendation suggested by the findings involves increasing specialized training on HIV/AIDS for doctors outside the AIDS centers, and especially for those who work in settings or specialties where they are likely to encounter patients infected with HIV. In addition, while it is perhaps unrealistic to expect 100 percent of doctors who work in AIDS centers to have specialized training, the number should nonetheless be higher than 82 percent.

The emphasis of the AIDS centers on the treatment and prevention of HIV/AIDS is reflected in the disproportionate concentration of “infectionists” (infectious disease specialists) and epidemiologists among AIDS center doctors. Among hospital doctors, we find greater representations of gynecologists, dermatologists, narcologists, and pulmonologists.

Perhaps surprisingly, given the difficulties befalling the medical sector in contemporary Russia, both AIDS center and hospital respondents exhibit relatively high (and similar) levels of satisfaction with their jobs: 80 percent say they are at least “mostly satisfied.” This is an encouraging sign. So is the relatively symmetric age distribution of doctors who treat patients with HIV. While it might be preferable to see larger numbers of younger doctors in these samples, it would be far worse if older doctors predominated, as that might imply an imminent shortage of medical personnel to deal with HIV/AIDS. Finally, we note that roughly three quarters of Russian doctors who treat patients with HIV are women, which is broadly consistent with the known gender distribution of the medical profession in Russia.

The extent, relative importance, and meaning of the HIV/AIDS epidemic

How do doctors view the severity of the HIV/AIDS epidemic relative to other problems facing Russia and to other health crises? What trajectory do they anticipate for the epidemic in the near future? Do they see HIV/AIDS as a disease that differs fundamentally from other diseases? We addressed some of these questions in focus groups we conducted in 2003 and 2005.⁴ But all the participants were Moscow residents; thus, they may not have provided a representative picture of doctors’ views. Our quantitative data provide a more solid basis for assessing typical answers to these

³The maximum 95 percent confidence intervals (“margins of error”) for random samples of sizes 404 and 804 are, respectively, 4.9 percent and 3.5 percent. However, the highly clustered and non-random sample design probably calls for a more conservative interval. A reasonable design weight might be .7, which yields respective confidence intervals of 5.8 percent (for AIDS center doctors) and 4.1 percent (for hospital doctors). We describe our survey methodology and sample design more fully in the Appendix.

⁴Theodore P. Gerber and Sarah E. Mendelson, “Crisis Among Crises Among Crises: Public and Professional Views of the HIV/AIDS Epidemic in Russia,” *Problems of Post-Communism*, Vol. 52, no. 4, July/August 2005, pp. 28-41.

questions. They also yield insight into how frequently doctors working inside and outside HIV/AIDS centers encounter patients with HIV and with AIDS.

HIV/AIDS relative to other problems facing Russia

We opened our survey by presenting respondents with a list of some 25 problems confronting Russia today, including “the spread of AIDS,” and asking them which five or six of these problems worry them the most. Figure 1 shows the percentage of our sample that chose each problem, as well as the corresponding percentages from two other recent surveys we conducted: a national survey of 2,400 adults in July 2004 and a survey of 2,000 16 to 29 year olds in June 2005.⁵ Doctors who treat patients infected with HIV are clearly distinguished from the general population and from Russian youths by the extent of their concern about HIV: more (58 percent) chose “the spread of AIDS” than any other problem. While doctors’ widespread concern over poverty (55 percent) echoes that of the general population and their concern over rising drug abuse (49 percent) resembles that among youths, doctors evince a greater degree of worry about moral and cultural crisis (47 percent) and lower levels regarding crime, price increases, and unemployment.

We found only one significant difference by region and establishment type regarding views of the most serious problems facing Russia, but it is important because it involves the main variable of interest. Concern over the spread of AIDS is more widespread in higher prevalence regions and among doctors who work in AIDS centers (Figure 2). Fewer than half of the hospital doctors in medium and low prevalence regions view AIDS as one of Russia’s most serious problems, compared to nearly 80 percent of AIDS center doctors in high-prevalence regions. These variations by region and establishment type hold up when we control for the effects of other variables (specialized training, age, gender, ethnicity, religion, frequency of contact with HIV and AIDS patients, and medical specialty) in a multivariate logistic regression (see appendix table A1).

HIV/AIDS relative to other health problems

With the possible exception of “access to health care,” the spread of AIDS is the only health-related issue among those we asked about in our first survey question. Therefore, to get a better sense of how doctors view HIV relative to other health issues, we asked respondents to indicate which of a series of health problems facing Russia today they think are the most serious, second, and third most serious (Table 2).

Doctors are divided on what they see as the single most pressing health problem. About 23 percent of AIDS center doctors and 27 percent of hospital doctors identified alcoholism, which topped the list for both groups. Among AIDS center doctors, cardiovascular disease follows closely behind alcoholism, while HIV/AIDS and cancer are essentially tied for third place. Among hospital doctors, cancer is second, cardiovascular disease third, and HIV/AIDS comes in a fairly distant fourth. Thus, although 19 percent of AIDS center doctors and 13 percent of hospital doctors view HIV/AIDS as the single most important health issue, larger percentages identify other

⁵ The July 2004 survey was also supported by the Ford Foundation, and the 2005 youth survey was supported by grants from the Charles Stewart Mott Foundation and the Glaser Progress Foundation.

problems instead: alcoholism, cardiovascular disease, or (among hospital doctors) cancer. These quantitative results essentially confirm our focus group findings.⁶

Another way to look at this question is to see what percentages identified HIV/AIDS and other health problems as one of three most pressing in the country. By this measure, HIV/AIDS clearly comes out on top among AIDS center doctors, two thirds of whom identified it. For them, the next closest affliction is cardiovascular disease, at 52 percent. Among hospital doctors, HIV/AIDS, cardiovascular disease, cancer, and alcoholism are all virtually tied at roughly 50 percent. Narcotics use also appears to be a major concern to substantial numbers of both AIDS center and hospital doctors.

The likelihood of perceiving HIV/AIDS as the most serious health problem in Russia varies by regional prevalence, as well as by establishment type, with doctors in high-prevalence regions the most likely to see it that way (Figure 3). However, when we control for other variables, these difference lose statistical significance (see Table A1).

It stands to reason that doctors who treat patients with HIV/AIDS see the epidemic as one of the most serious health problems facing Russia today. Yet at the same time, it would be inaccurate to say that they tend to view HIV as the single most important health crisis. Thus, while they recognize the menace that HIV poses to the country's health, most of them also recognize other health problems as just as, or somewhat more, pressing. Again, based on similar findings from our focus groups, these data offer further evidence that the international community might make more headway on the issue of HIV/AIDS if, in discussions with Russian health care professionals, the Russian government and the population at large concerns about HIV were linked somehow to concerns about the various other health care issues challenging Russians today.⁷

Severity and meaning of the epidemic

We turn now to a series of eleven questions pertaining specifically to the perceived severity and distinctive meaning (if any) of the HIV/AIDS epidemic, all in the form of statements to which the respondents agreed or disagreed with different levels of intensity (Table 3).

About two-thirds (64 percent) of the total sample agreed that the fight against HIV/AIDS should be the government's most important priority, and about one third disagreed. While this suggests doctors who treat patients with HIV generally advocate that the government devote more attention to HIV than to other health problems, the next two questions paint a different picture. An even larger majority (85 percent) agreed that while HIV/AIDS is important, Russia has other more serious health problems. Only 13 percent disagreed. Also, 62 percent agreed that HIV/AIDS should not be treated differently than other serious health problems, while 35 percent agreed.

⁶ Gerber and Mendelson, "Crisis Among Crises Among Crises."

⁷ There is some evidence that a shift in the messages from the international community are beginning to change: See "Dying Too Young: Addressing Premature Mortality and Ill Health Due to Non-Communicable Diseases and Injuries in the Russian Federation," World Bank, December 2005; <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/ECAEXT/0,,contentMDK:20661159~pagePK:146736~piPK:146830~theSitePK:258599,00.html>.

Considered in conjunction with the results from the prior section, these results again confirm that Russian doctors who treat patients with HIV see the disease as a major health concern and want the government to take stronger action to combat it, but at the same time, they also see other major health problems as posing equal or greater threats and also requiring more decisive government action. They balk at the idea that HIV/AIDS should be treated as a problem that differs in some essential way from other important health challenges. Of course, their reluctance to support treating HIV as distinctive may stem from an awareness of the problems posed by the stigmatization of people living with HIV/AIDS. Whatever the motive, the pattern of prevailing responses suggests that even AIDS center doctors are unlikely to embrace the message that HIV/AIDS should be singled out as more important or serious than other health concerns in Russia today. The differences by region and establishment, while for the most part statistically significant and intuitively predictable, are modest with respect to these questions (Figures 4-6).

The remaining questions pertaining to the severity of the epidemic leave no doubt: most Russian doctors who treat patients with HIV indeed see HIV as a major threat facing Russia. Eighty-eight percent agree that HIV/AIDS jeopardizes Russia's national security, 65 percent agree that the epidemic has already reached catastrophic proportions, and 74 percent agree that without decisive government action 5 percent or more of Russia's population may be infected by 2007 – a staggering figure. They are evidently not optimistic about the prospects for such action, as 9 out of 10 say that most Russian politicians underestimate the seriousness of HIV/AIDS. While some officials we interviewed and some participants in our 2003 focus group opined that the epidemic would likely stay confined to intravenous drug users, very few (8 percent) of our survey respondents concurred. By all these measures, a substantial majority of Russian doctors who treat patients with HIV or AIDS sees the epidemic as a major and growing health threat.

We also asked three questions relating to specific distinguishing characteristics that doctors might associate with HIV/AIDS in comparison to other diseases. We were surprised to hear some participants in our focus groups assert that foreigners introduced HIV/AIDS in Russia in order to weaken the Russian people. Our survey suggests that only a small, if non-trivial, proportion of doctors (10 percent) adhere to this conspiracy theory.⁸ Similarly, most agree (79 percent) that HIV/AIDS would be just as serious a problem if the Soviet Union had not collapsed, thus rejecting the view (also voiced in our focus groups) that the epidemic is linked to the demise of the USSR.

At the same time, four fifths of our sample agreed with another sentiment we encountered in the focus groups: that the spread of HIV/AIDS reflects the moral and cultural decline of the Russian people. The connection that many doctors make between HIV/AIDS and moral decline helps explain why exceptionally high numbers of them identify moral/cultural crisis as one of the main problems confronting the country (see Figure 1 above). It also suggests that doctors themselves tend to view HIV/AIDS in different terms than they view other diseases, even if they do not necessarily advocate that the

⁸ In our June 2005 survey of 2,000 16-29 year old Russians, we found that an astonishing 28 percent of Russian youth believe that HIV had been introduced to Russia by foreigners to harm Russia.

government treat it differently. Because doctors evidently associate HIV/AIDS with moral decline, we should be particularly concerned about the possibility that they treat patients with HIV/AIDS differently than other patients.

Frequency of contact with HIV-infected patients, AIDS patients, and deaths from AIDS

As we would expect, the frequency with which doctors see patients who have HIV and patients who have AIDS varies substantially by both regional prevalence and establishment type. Large majorities of center doctors in both high-prevalence (74 percent) and medium prevalence (67 percent) regions treat HIV patients on a daily basis; considerably fewer (36 percent) in low prevalence regions do so. Even in high-prevalence regions, only 18 percent of hospital doctors have daily contact with HIV positive patients. In low prevalence regions, only 5 percent encounter HIV positive patients more than once a month and 73 percent have seen them less than once a month or not at all during the last year.⁹

Similar variations obtain regarding treatment of AIDS patients over the last year. AIDS center doctors in high prevalence regions are naturally the most likely to treat AIDS patients on a daily or weekly basis (43 percent): considerably fewer in medium (26 percent) and low (12 percent) regions. In the latter, none of the hospital doctors have had weekly contacts with AIDS patients, and the vast majority (95 percent) less than monthly or never. Even in high prevalence regions, only 20 percent of hospital doctors report seeing AIDS patients at least once a month. These data illustrate the relatively recent character of the HIV/AIDS epidemic: HIV-positive patients who have not yet developed AIDS still vastly out-number patients with AIDS. Also, these results show that the disparities across regions according to official data are reflected in our survey data, which lends more credence to both sources of information on regional variations in the extent of the HIV/AIDS problem.

Finally, the data show that deaths from AIDS-related complications remain relatively rare. Some Western observers argue that official mortality statistics conceal a growing number of AIDS-related deaths by attributing them to more proximate causes even though AIDS was clearly the underlying cause.¹⁰ Our survey provides a basis for assessing the plausibility of this claim, since doctors themselves should know full well when AIDS-related complications are the main cause of their patients' demise. Even among AIDS center doctors in high-prevalence regions, relatively few (19 percent) report more than 50 deaths from AIDS during the past year. At the other extreme, among hospital doctors in low prevalence regions none report any more than 10 deaths and two thirds report none at all. Overall, our survey data provide no sign of extensive mortality from AIDS-related complications.

Treatment, supply, and safety issues

⁹ Note that only doctors who have treated at least one patient with HIV at some time in their careers were included in the survey; thus, the data taken as whole probably overstate the frequency of encounters with which the typical hospital doctor encounters patients with HIV or AIDS.

¹⁰ Murray Feshbach and Christina M. Galvin, "HIV/AIDS in Russia—An Analysis of Statistics," Report Published by the Woodrow Wilson International Center for Scholars, Washington, DC, January 2005.

There is a virtual consensus in most countries that anti-retroviral (ARV) therapies are the most effective treatment for HIV and that 100 percent compliance with ARV treatments is not only vital to the success of the treatments but is also necessary to prevent the mutation and replication of drug-resistant strains of the disease. Thus, a crucial question in the Russian context is whether doctors who treat patients with HIV are aware of ARV therapies, whether they see them as effective, and what level of compliance with treatment they see as necessary. Experience has shown that other aspects of treatment such as support groups, psychological counseling, and regular viral monitoring also can play an important role: how do Russian doctors feel about these practices and are they widespread for HIV patients in Russia? What unmet needs hamper the ability of Russian doctors to treat patients with HIV, and do doctors think they are exposed to a greatly enhanced risk of HIV infection in the context of their working conditions? We address these questions in this section.

ARVs: familiarity, views on effectiveness, and treatment standards

We found so much variation in knowledge about ARVs by establishment type that we report only separate distributions on these questions (Table 5). Virtually all of the AIDS center doctors have heard of ARVs and see them as a treatment for HIV, while about 20 percent of hospital doctors either have not heard of ARVs or do not think they treat HIV. Only 30 percent of the hospital doctors correctly recognized ARVs as effective in the treatment of HIV alone (compared to nearly three quarters of the AIDS center doctors), while 50 percent responded that ARVs were useful in treating a “wide variety of viruses, including HIV.”

The ARV knowledge gap between AIDS center and hospital doctors is also evident regarding the effectiveness of ARVs. Eighty-seven percent of AIDS center doctors believe categorically that ARVs are effective in the treatment of HIV, versus 36 percent of the hospital doctors. To some extent, this gap is due to the difference in training: our multivariate analysis shows that training significantly increases belief in the effectiveness of ARVs (see Table A1). But training is only part of the story, because even controlling for training and other variables, AIDS center doctors are significantly and substantially more likely to endorse the effectiveness of ARVs than hospital doctors. Also, infectionists are significantly and substantially more likely to do so than doctors in other specialties. We also found that AIDS center doctors are much more likely than hospital doctors to say that ARVs can prolong life for an extended period of time: 61 percent versus 38 percent say they can do so for 10 years or more.

Given the level of knowledge, one might wonder what doctors are suggesting to patients about compliance with regimens, especially for those patients who do not tolerate ARVs well. Adherence levels worry advocates and doctors the world over. We asked two questions directly related to adherence and found evidence that some doctors, especially outside of AIDS centers, do not understand how to prescribe ARVs and handle their side effects. Among AIDS center doctors, 85 percent in high prevalence regions advocate strict adherence, compared to 76 percent in medium prevalence regions, and 72 percent in low prevalence regions. Among hospital doctors, 71 percent in high prevalence regions, but only 54 percent and 57 percent in low and medium prevalence regions insist on 100

percent adherence. These patterns hold up when other variables are controlled (Table A1).

We later asked which statement best reflected their opinion: that it was essential that patients continue ARV treatment without interruption, occasional breaks were ok, and each case was unique so one cannot generalize about uninterrupted treatment. About 28 percent of AIDS center doctors advocate uninterrupted care, compared to 18 percent of hospital doctors. But nearly half of doctors in both types of establishments say that every case is different, so one cannot generalize. Doctors who have received training are more likely to insist on 100 percent compliance (see Table A1.) These findings lend credibility to the concern that doctors – even those in AIDS centers – are not averse to letting patients take a break from medicine. To prevent the development of drug resistance, all doctors should be informed that 100 percent is the accepted standard.

The data suggest that doctors should be encouraged also to consistently monitor their patients' compliance with treatment protocols. As things stand, 62 percent of AIDS center doctors always do so, and another 17 percent sometimes do. In contrast, hospital doctors report lower levels of monitoring (44 percent and 14 percent).

ARVs: availability and access

We asked respondents about the availability of ARVs in their region, since it is widely reported that medicine is scarce and few HIV infected patients in fact receive treatment.¹¹ Here we might expect regional differences to be paramount. In fact, we observe a modest tendency for greater shortages in high prevalence regions (Table 6). While the situation is far from ideal, it is nonetheless somewhat reassuring that only 12 percent of doctors in high prevalence regions, 8 percent in medium prevalence, and 4 percent in low prevalence regions say that ARVs are not available at all in their localities, despite a need for them. We also find substantial variation across establishment type with respect to knowledge about the availability of ARVs: in particular, hospital doctors are much more likely to find it hard to say how available ARVs are compared to AIDS center doctors (38 percent versus 7 percent).

From 88 percent to 93 percent (depending on region) of doctors surveyed say that ARVs are available at HIV clinics. This number is notably higher among AIDS center doctors than hospital doctors (91 percent versus 71 percent), with the latter more likely to find it hard to say. Of course, this makes sense since hospital doctors are less likely to be treating patients infected with HIV for their HIV symptoms. According to the doctors, the availability of ARVs in other venues is more limited.

Other treatments in theory and practice

Most doctors who treat patients with HIV believe that support groups are either indispensable (60 percent) or useful (28 percent) for successful treatment (Table 7). Even more say the same about psychological counseling (77 percent and 17 percent). Somewhat smaller majorities advocate monthly monitoring of T-cells and viral load.

¹¹ “UNAIDS Epidemic Update 2005,” p. 49, available at http://www.unaids.org/epi2005/doc/EPIupdate2005_pdf_en/Epi05_07_en.pdf

Differences by establishment type and region are minor with respect to these issues, though our multivariate analysis showed that specialized training increases belief in the merits of support groups (Table A1).

We see a yawning gap between the degree to which doctors support these treatment measures in theory and the degree to which they implement them in practice. Only 21 percent say that half or more of their patients have access to support groups in their establishment, while 43 percent say none do. The picture is a bit more encouraging with respect to counseling, but the 44 percent who say that half or more receive counseling falls well short of the 77 percent who say it is indispensable. Similar shortfalls obtain in regard to T-cell and viral monitoring. Although these types of monitoring are more important at certain stages of the disease than others, our emphasis here is on the gap between the stated support for specific treatments by Russian doctors and the degree to which these treatments are provided to patients with HIV.

AIDS center doctors apparently meet with their HIV infected patients somewhat less frequently than hospital doctors, which may reflect differences in the treatment requirements for HIV as opposed to the various ailments for which HIV infected patients consult doctors outside the AIDS centers.

Needs and safety concerns

The various shortages reported by the doctors in our survey, particularly those outside the AIDS centers, represent pressing needs. One quarter overall report shortages of latex gloves at least sometimes: the figure is only 7 percent for AIDS center doctors versus 31 percent for hospital doctors. Fourteen percent overall report shortages at least sometimes (only 6 percent among AIDS center doctors) of single-use syringes. Gloves and syringes are indispensable for protecting the safety of doctors and patients alike.

Shortages of medicines are even more widespread. The range is large with 88 percent of AIDS center doctors from high prevalence regions reporting some shortages (48 percent of these are “always” or “often”). Nearly three quarters of all doctors surveyed report experiencing some shortages in medicine. According to our data, hospital doctors are slightly more likely to keep a personal supply of medicine in case it runs out. However, this finding should be viewed cautiously, since this activity would be considered unethical and possibly illegal. Seven percent in AIDS centers report some shortage of “safe blood supply;” 28 percent outside of AIDS centers.

Perhaps the most serious shortage Russian doctors confront is a shortage of specialists. Forty seven percent of AIDS center doctors and 36 percent of hospital doctors say their establishments do not have a sufficient number of doctors. Clearly, as the epidemic grows, the need for new doctors specializing in the treatment of HIV/AIDS will continue to outstrip the supply unless active measures are taken to address the growing gap.

Fear of contracting HIV can affect willingness of doctors to treat patients who have the disease and might also deter some doctors from obtaining the needed training. AIDS center doctors are much more likely to dismiss altogether the risk of contracting HIV from treating patients (35 percent versus 15 percent); fewer than 5 percent perceive a

substantially enhanced risk (compared to 24 percent of hospital doctors). Hospital doctors are more likely to be “very seriously” or “to some degree concerned” (68 percent) about contracting HIV, while AIDS center doctors are less likely (43 percent). AIDS center doctors are twice as likely to be “completely unconcerned” about infection as the hospital doctors (24 percent versus 12 percent). The most plausible explanation seems linked to their education on the management of the risks. Doctors in both types of establishments are frequently tested for HIV.

Doctor and patient

We examine three important aspects of the doctor/patient relationship in Russia: discrimination against patients with HIV or certain groups of them due to stigma, the issue of supplementary payments for treatment, and the confidentiality of HIV diagnoses.

Activists and observers who focus on HIV worry about the possible social stigma associated with the disease itself and with particular groups who are most likely to become infected. The stigmatization of HIV infected individuals leads in many cases to the denial of their human rights and fosters the secrecy and denial that in turn fuel the epidemic. One possible result of stigma might be blocked access to medical care, if doctors themselves view certain categories of HIV infected patients as less deserving of treatment.¹² The issue of potential stigmatizing of HIV patients by Russian doctors is particularly acute in light of an infamous letter sent by Russian medical students to a newspaper at the outset of the epidemic, in which they praised the disease for ridding Russian society of undesirable elements.¹³ The results we reported above suggesting that doctors link the spread of HIV to moral/cultural decline point certainly to the potential for such stigmatizing views.

We probed the issue of possible stigma somewhat indirectly, by asking our respondents whether different categories of HIV patients deserve to receive ARV treatment paid for by the government and also whether they believe it is okay for doctors to refuse treatment to HIV patients in some circumstances. The results are striking in their variation. Doctors almost universally say that the government should pay for ARV treatment for children who contract HIV from their mothers and for those who contract it via blood transfusion (Table 9). Clearly, these two groups of patients are considered as “deserving,” or as some suggested in focus groups “innocent.”

There is, however, less agreement about government-paid ARV treatment for other types of patients. According to doctors in the survey, drug addicts are the least deserving of such support: fewer than 60 percent of doctors, both within and outside AIDS centers, advocate government-paid ARV therapies for them. Many doctors – especially hospital doctors – seem to view homosexuals, prostitutes, and prisoners as not deserving government sponsored treatment. People who infect their spouses rank higher than these highly stigmatized groups, but they fall short of complete endorsement as deserving. In all, only 53 percent of AIDS center doctors and 44 percent of hospital doctors say that all

¹² Human Rights Watch, “Lessons Not Learned: Human Rights Abuse and HIV/AIDS in the Russian Federation,” April 2004.

¹³ David Powell, “The Problem of AIDS,” in Mark G. Field and Judyth L. Twigg (eds.), *Russia's Torn Safety Nets: Health and Social Welfare during the Transition* (New York: St. Martins), pp. 123-151.

seven categories of HIV patients should receive government-paid ARV treatment. This implies that a substantial number of doctors do view certain categories of HIV patients – particularly drug addicts, homosexuals, prostitutes, and prisoners – as less deserving of treatment and that stigma may indeed affect the doctor/patient relationship when these types of patients are involved. It is encouraging that such stigmatizing views are more muted in the AIDS centers, yet even there they are not absent.¹⁴

While only small proportions (on the order of 2 percent) of doctors surveyed say it is generally acceptable for doctors to refuse treatment to an HIV infected patient, more -- 9 percent of AIDS center doctors and 22 percent of hospital doctors -- say it is acceptable to do so in some circumstances. Altogether, more than one quarter of hospital doctors and more than 10 percent of AIDS center doctors do not categorically insist that HIV infected patients should always be treated. Twelve percent of hospital doctors say they have heard of at least some instances in their establishment where doctors in fact refused treatment to HIV infected patients. This number does not imply that such refusals are rampant, but it does suggest they are unacceptably common. Here, too, the situation is better in the AIDS centers and among doctors who have received training in dealing with HIV/AIDS – even when other variables are controlled (see Table A1) – but in the centers, 6 percent of doctors say they have heard of instances where treatment was refused. Moreover, the fact that relatively few doctors chose the response category “I don’t think doctors ever refuse” when asked about motivations for denying treatment for HIV infected patients is yet more evidence that this behavior occurs. Taken together, these results imply that it is not at all unheard of for doctors to refuse to treat HIV infected patients in Russia.

Journalists have written about how doctors in Russia often demand supplementary payments from patients in order to provide treatment.¹⁵ This practice might be especially widespread with respect to HIV treatment, since the patients are a highly vulnerable group. Our results suggest that this form of corruption does take place, but infrequently: 91 percent of AIDS center doctors and 71 percent of hospital doctors say it never happens in their establishments. But 13 percent of hospital doctors say that a few doctors in their establishment demand such payments and another 2 percent say that more than half do. Taking into account that doctors may well understate the prevalence of this practice out of loyalty to their colleagues (and perhaps out of their own guilt, if they themselves take extra payments), these numbers suggest that supplementary payments enter into a non-trivial number of doctor/patient relationships, though probably less often in AIDS centers.

As for confidentiality, we asked whether doctors should have the right to disclose, the duty to disclose, or no right to disclose the results of a patient’s HIV diagnosis to certain third parties. A belief in full confidentiality would be reflected in the latter category, while a belief in full disclosure would lead one to choose the first category. The most

¹⁴ Moreover, when we constructed a scale measuring the number of groups whom the doctors view as deserving of government-sponsored treatment and performed an OLS regression, we found that the difference between AIDS center and hospital doctors is not statistically significant when other variables are controlled. Greater tolerance is in fact characteristic of low and medium prevalence regions (relative to high), as well as infectionists (relative to other specialties). See Table A1 for details.

¹⁵ Peter Baker and Susan Glasser, *Kremlin Rising: Vladimir Putin’s Russia and the End of Revolution* (New York: Scribner, 2005), p. 190.

common answers vary for the different third parties we asked about. Substantial majorities think doctors either have a duty or a right to disclose the information to immediate family members (such as spouses or parents of minors) and caregivers of HIV patients. Advocates of strict adherence to the norm of doctor/patient confidentiality will be alarmed by this. On the other hand, support for protecting confidentiality is uniformly high (87 percent to 96 percent) in regard to potential disclosure to more distant third parties (employers, school officials, and the mass media).

In sum, our data on views regarding three aspects of doctor/patient relations reveal ambiguous pictures. While stigma and potential discrimination do not appear to be rampant among doctors who treat HIV-infected patients, neither do they appear to be completely absent. The same goes for the demand for extra payments. Both phenomena are less common in the AIDS centers, but both can be observed there. Bearing in mind that social desirability bias and collegial identification probably lead respondents to, if anything, understate the extent of these phenomena, the data suggest these attitudes and behaviors are common enough to merit further attention and analysis. As for confidentiality, we see a mixed picture: norms of confidentiality are weak with respect to close family members of the patient, but much stronger (though not universal) with respect to more distant third parties. Advocates of 100 percent confidentiality have much work to do.

Courses of action

Finally, we turn to the question: what, according to doctors, is to be done? We gain one perspective on this issue by looking at their views on the main sources of Russia's health crises. We also probed their views on the level of government spending, on specific policy measures to combat the spread of HIV/AIDS, and on possible ways they can improve their own effectiveness as physicians treating HIV infected patients. Finally, we devoted a number of questions throughout the survey to the topic of Western assistance, an especially pressing issue in the current political climate of Russia.

Causes of Russia's health problems – and possible solutions

We find little variation across establishment types in regard to diagnoses of the main sources of Russia's health problems (Table 10). The most common view identifies inadequate government financing as the main culprit (47 percent); the second most common view cites low pay for doctors (25 percent). No other cause was nominated by more than 6 percent of the sample as the most important. This suggests that doctors would advocate increased government spending on health care and increased salaries for doctors as the two most effective measures for combating health problems in Russia. However, in addition to low expenditures and low salaries, lack of access to health care, poor health education, and poverty all are viewed by at least 20 percent as among the top three problems. More than two-fifths of doctors in our sample see inadequate government spending on health care as one of the three main causes of Russia's health problems. When asked explicitly whether the government spends enough on health care, all but 4 percent say the government should spend more (and there is no significant difference across establishment type).

Support for more spending on HIV/AIDS is less universal, but also very strong: 83 percent of AIDS center doctors and 70 percent hospital doctors want the government to increase it.¹⁶ Money is not the only problem, however. We asked doctors to set aside the issue of money and consider whether the program was satisfactory or not. Most believe the government's program to fight HIV/AIDS needs fundamental reforms – somewhat more in the AIDS centers (70 percent) than in other establishments (64 percent).

As for concrete measures that might be taken to combat the epidemic, promotion of condoms and sex education receive the most widespread endorsement – over 90 percent in each case (Table 11). More than 80 percent advocate campaigns to promote sexual fidelity and abstinence. We are surprised that support is so strong, at 78 percent, for demanding that all foreigners entering the country show proof of HIV negative status. Most doctors also support needle exchange (77 percent of AIDS center doctors, 68 percent of hospital doctors), yet most also advocate more draconian measures against narcotics users (65 percent and 54 percent). They are about evenly split regarding whether prostitution should be legalized, and they generally oppose methadone treatments and the quarantine of HIV infected people. These answers show that doctors tend to support a wide variety of specific measures that have been proposed to combat the spread of HIV/AIDS, including some controversial or illegal ones (condom promotion, sex education, needle exchange, legalization of prostitution).

As noted above, we found a knowledge gap between doctors who had received specialized training in the epidemiology, monitoring, and treatment of HIV and those who had not. At the same time, 72 percent of all those surveyed want additional training. The donor community might play an important role in facilitating access to training. Additional research might reveal which type of training doctors want and need most.

How to reach doctors: sources of information

By examining where doctors get their information about HIV, we can identify the outlets most promising for reaching doctors. They appear to get most of their information from a few specific places and would like to get more information from those sources. Journal articles, scholarly meetings and continued education seminars are the most likely sources. AIDS center doctors use these sources more frequently than hospital doctors. AIDS center doctors also rely heavily on informal contacts with colleagues, much more than hospital doctors. Internet sites, listservs and media reports are less common resources for learning about HIV. Although a recent TPAA survey suggests media may indeed play a role in public education, it seems to play little role for medical professionals.¹⁷

A role for assistance from the West?

The Russian government has recently adopted legislation that may affect the ability of Western organizations to distribute assistance to Russian nongovernmental organizations.

¹⁶ Note that this survey was completed before President Vladimir Putin made the announcement on September 27, 2005 that the Russian government intended to increase its spending on HIV/AIDS in 2006 from approximately \$4 million to \$105 million. <http://en.rian.ru/russia/20050927/41522777.html>

¹⁷ "Survey Shows Russians Want Greater Media Attention and Education on HIV/AIDS," October 27, 2005 (press release from TPAA) available at <http://www.tpaa.net/news/pressreleases/?id=1504>

The legislation comes after a series of remarks from Kremlin insiders, including the president himself, on the pernicious role of Western assistance. How widely are these views shared with regard to assistance on health issues? Specifically, do doctors view western assistance for work on HIV as undermining of Russia or otherwise unnecessary?

Our findings show little evidence that these front-line health professionals share the concerns of the Putin administration or the Duma (Table 12). About three quarters of our sample agree that foreign organizations working to help stop the spread of HIV “only want to help Russia.” We find also enormous openness to understanding and learning from the experience of other countries on this issue: 94 percent believe there are lessons to be learned from international experiences with this disease. Russian doctors also tend to disagree that international organizations overstate the severity of the epidemic in Russia.

When asked, however, whether “our government has the capacity to control AIDS without advice from abroad” we find slightly more nationalism among AIDS center doctors. About 42 percent of AIDS center doctors and 33 percent of hospital doctors completely or mostly agree with this statement. But this nationalism appears to have real limits. When asked outright “should Russia face AIDS independently or accept foreign assistance” three quarters believe Russia should seek “foreign assistance.” The question (D 37) specifically mentions the Global Fund to Fight AIDS, Tuberculosis and Malaria. Support for foreign assistance is especially pronounced in high prevalence regions, a result that stands when other variables are controlled (see Table A1).

Recommendations for the Policy and Donor Community

The survey results confirm our previous findings that Russian doctors generally understand the HIV epidemic as serious but not as the most serious issue in terms of Russia’s health. As we have suggested previously, the international community may make more headway in combating the spread of HIV by actually taking into consideration the views of these front-line health professionals and embedding the focus on HIV in the numerous health crises before Russia.

Our survey revealed two major needs that Russian doctors who treat people with HIV or AIDS experience: a need for more knowledge and training and a need for more medicine and other supplies. Our respondents also expressed an eagerness to accept international assistance and apply lessons learned from other contexts. Given this high level of interest and support for continued foreign assistance, international donors should feel compelled to consider ways of reaching these doctors and helping encourage the development of a new generation of doctors even if new Russian legislation concerning assistance makes transnational cooperation additionally complicated. While programs sponsored by such organizations as UNODC, WHO, DFID, USAID and TACIS do target doctors, donors can play a greater role helping address the deficits in knowledge and training and also in supplies and medicine suggested by our survey.¹⁸

¹⁸ “Internationally Funded HIV-related Activities in the Russian Federation 2005,” UNAIDS/Moscow, available at http://www.unaids.ru/site_admin_predpr/f/Inventory_2005_En.pdf

To develop the necessary expertise: In both AIDS centers and in other medical establishments, doctors want and need more training on the epidemiology, management, and treatment of HIV. Our results show that training and experience enhance the expertise of doctors who deal with HIV infected patients, particularly with respect to the effectiveness of ARVs, but also with respect to treatment protocols, support groups, and treatment norms (never refusing treatment). Training, in other words, makes a big difference.

The data suggest the need for training is greatest for doctors who do not work in AIDS centers yet come into regular contact with HIV infected patients. In question after question, we find a substantial gap in knowledge and norms between AIDS center and hospital doctors. Even assuming that the current system whereby most patients receive treatment for HIV and AIDS at the AIDS centers remains in place for the foreseeable future, as the epidemic spreads, increasing numbers of doctors outside those centers will be encounter HIV infected patients. The soundness of the advice they give, their willingness to provide treatment, their ability to answer questions are all therefore crucial. They must receive training so that these doctors can better serve patients.

At the same time, doctors who work in AIDS centers also clearly want additional training. They should receive it, and they should also receive the reinforcements they clearly wish to have. Donors should not only figure out how to provide more training to existing doctors, but develop programs to encourage future generations of doctors in Russia to specialize in the treatment of HIV/AIDS. Support for the training of current doctors and recruitment and education of Russian doctors should probably be long-term priorities. One approach might be to invest in medical schools in Russia and also sponsor scholarships for Russians in medical schools abroad, with the requirement that they must return to Russia and practice.

To address the lack of supplies: Short-term needs for supplies and medicines can be addressed in several ways. Donors might consider program-related investments such as a loan to Russian partners (hospitals) to purchase and distribute vital supplies like latex gloves and single-use needles. Additional research may need to be done to understand the market and distribution of these commodities, but these gaps in supplies must be addressed in order to protect the rights of doctors concerning unnecessary risk of exposure to HIV while treating patients. Patient-care can only benefit.

To disseminate information effectively: Doctors seem interested in receiving additional information in a few specific ways in addition to training. Some have speculated that a listserv might be an effective and low cost way of reaching doctors, but the data do not suggest this is an especially fruitful way to proceed. Instead, doctors are most likely to respond to information provided in scholarly journals and seminars/conferences. Donors can relatively easily support subscriptions to journals or the translations of scholarly articles and their wider dissemination (perhaps in electronic form). They can support seminars, workshops, and conferences, including at international events, where they should also help cover Russian doctors' travel costs and admission fees. Our data suggest doctors should be targeted for awareness campaigns concerning issues of stigma. More research would need to determine the most effective messages in order to affect doctors' attitudes and practices.

To measure progress: As the Russian government begins to spend increasing amounts of money on HIV/AIDS in 2006 and 2007, as President Putin has recently pledged to do, doctors will become an essential source of independent information to gauge whether the promises are being fulfilled as well as a potential source of political pressure and advocacy to make sure the Russian government and the international donor community respond adequately. Additional tracking surveys that test our hypotheses, as well as probe other issues, will provide indispensable information to donors and the government alike about successes, failures, and new challenges in coping with the HIV/AIDS epidemic in Russia. Doctors have a unique perspective on whether treatment supply, training, and education programs are working. Surveys will give donors and the Russian government access to that perspective.

Appendix: Methodology and Sample

Survey design and implementation

In designing the survey questionnaire, we drew on focus groups we had previously carried out with doctors and health officials in Moscow as well as consultations with a variety of experts on the HIV/AIDS epidemic in Russia and elsewhere.¹⁹ Staff from the Levada Analytic Center, which carried out the survey, translated the questionnaire into Russian and provided additional feedback on its design. We had the questionnaire pre-tested on 10 doctors prior to finalizing it. The survey entered the field on July 26, 2005, and the last interview was completed on September 14.

Our basic sampling strategy was to identify AIDS Centers and other medical establishments where HIV infected patients would be diagnosed or obtain treatment, obtain permission from their administrators to conduct the survey, and then sample doctors within these establishments who had treated at least one HIV infected patient. In the vast majority of cases, the Levada Center obtained permission from the administrators of sampled medical establishments to carry out the survey with their employees often after the administrators (usually the “Chief Doctor”) consulted with departmental or regional medical authorities. Nine establishments did not permit the survey to take place. Four AIDS centers were among them: the Tyumen center categorically refused to participate in any research, the Tula center deemed the questionnaire inappropriate, the Moscow oblast center insisted on permission from the Russian Minister of Health, and the Moscow city AIDS center repeatedly delayed making a decision and claimed insufficient time, until it became clear that they would not participate.²⁰ The five remaining refusals came from medical establishments other than AIDS centers. These refusals to participate in the study on the part of these nine establishments are certainly unfortunate, but we are encouraged by the fact that 338 establishments did agree to participate.

Within each establishment included in the study, the interviewers obtained a list of doctors who treat or have treated HIV infected patients from the administration, and they randomly sought out respondents from these lists. Of course, the reliance on the administration for lists of potential respondents raises the possibility of various biases affecting the sample, as administrators may have purposely nominated doctors with particular views. However, we have reasons to doubt that such biases play a major role. Reports from the interviewers suggest that in most cases the administrators came up with as many names as they could, and they appeared more constrained by who was actually present at the establishment at the time than by any other consideration. In many instances they found it challenging to locate a sufficient number of respondents who met the criterion of having treated at least one HIV infected patient. While far from ideal, this

¹⁹ Gerber and Mendelson, “Crisis Among Crises Among Crises.”

²⁰ We encountered similar dilatory tactics and, ultimately, a refusal when we sought to include doctors from the Moscow city AIDS Center, the Federal AIDS Center in Moscow, and the Moscow oblast AIDS Center in the focus groups we conducted in February 2005. At the time, we feared that this reluctance reflected a general policy among AIDS Centers not to cooperate with any external research efforts. Fortunately, these fears turned out to be unjustified.

sampling design is the best realistic design that could be implemented, given the conditions and cost limitations. We cannot rule out the possibility that some biases may enter in, but we also have little reason to suspect any particular direction of bias with regard to specific questions. Given the absence of information about the views of Russian doctors on this topic, our data offers valuable insights notwithstanding the fact that our sample, like most involving hard-to-sample populations such as members of a specific cohort, in this case doctors who treat HIV, is not a true probability sample.

The response rate was very high: 94.4 percent of doctors who could be contacted. The interviews were conducted face-to-face, with the interviewers verbally asking the questions and recording the answers of the respondents. Respondents were paid a small honorarium in appreciation for their time. The Levada Center contacted 490 of the respondents to verify the work of the interviewers, and all 490 interviews were confirmed.

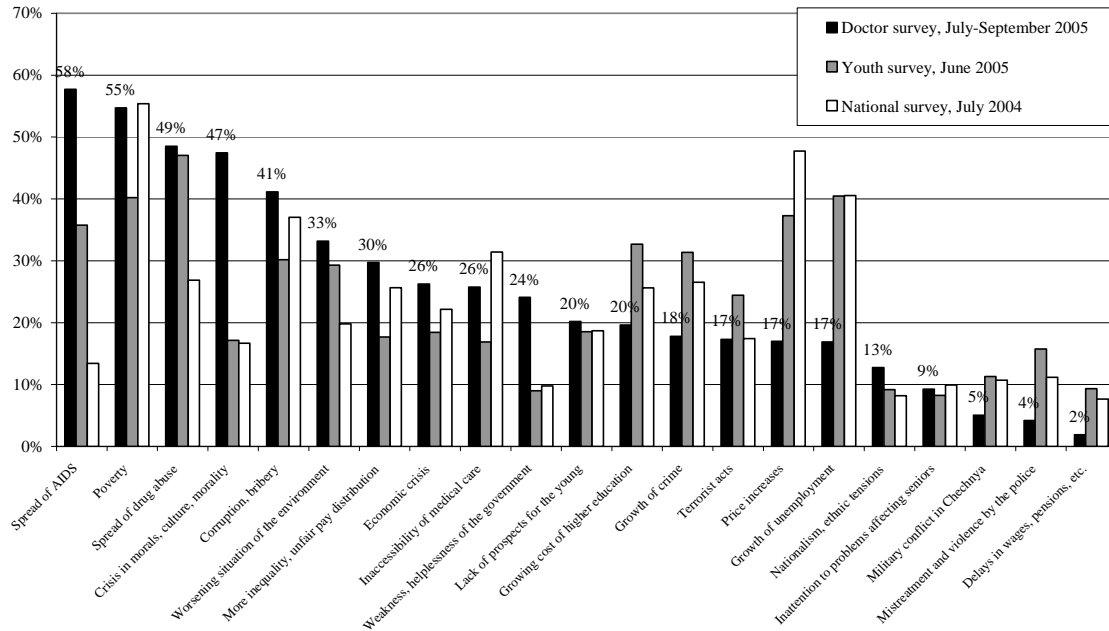
While our sampling strategy is necessary to support robust comparisons across groups and establishment types, it poses some problems for the interpretation of overall sample characteristics. We should be cautious in making inferences about the larger population of Russian doctors who have treated HIV infected patients on the basis of sample data because we have no way of knowing whether the sample distributions by region and establishment type correspond to the population distribution across these dimensions. To the extent that doctors' attitudes vary systematically across categories of regional prevalence and establishment type, the overall sample characteristics can be biased by the over- and under-representation of doctors in particular combinations of these categories. Survey researchers often use post-sampling weights to adjust their full-sample estimates for under- and over-sampling of subgroups that differ with respect to the variables of interest. However, we have no basis for computing such weights, since we do not know the relevant population proportions: we do not know (even roughly) what proportion of Russian doctors who have ever treated HIV infected patients work in AIDS centers in high prevalence regions, what proportion work outside AIDS centers in medium prevalence regions, etc.

In light of this consideration, it might be advisable not to report aggregate results at all and instead present separate data for each combination of region and establishment type separately. However, this would be far too cumbersome, and in any case the difficulty applies only to the extent that a particular variable varies systematically with either of these two "structural" characteristics. Accordingly, we present results separated by region and/or establishment type for those measures where the differences are not only statistically significant, but large and noteworthy. In cases where our analysis shows little or no difference across regions and establishment types, we present the "overall" distributions.

TABLE 1. Basic Sample Characteristics, Survey of Russian Doctors

	<i>AIDS Center (N=404)</i>	<i>Hospital (N=804)</i>	<i>Overall (N=1208)</i>
Prevalence of HIV in region			
High: 200+ per 100k	32%	35%	34%
Medium: 60-199 per 100k	36%	31%	33%
Low: under 60 per 100	32%	35%	34%
Has training in AIDS epidemiology, treatment, or prevention			
	82%	55%	64%
Specialty			
Dermatologist, venerologist	9%	18%	15%
Infectionist	41%	16%	24%
Narcologist	1%	19%	13%
Gynecologist	5%	24%	18%
Pulmonary specialist	1%	11%	8%
Immunologist	5%	0%	2%
Epidemiologist	23%	1%	8%
Laboratory doctor	6%	3%	4%
Other	8%	8%	8%
How satisfied are you with your job?			
Completely satisfied	24%	24%	24%
Mostly satisfied	61%	55%	57%
Mostly unsatisfied	15%	17%	17%
Completely unsatisfied	1%	4%	3%
Age			
22 to 29	10%	12%	11%
30 to 39	26%	24%	24%
40 to 49	32%	34%	33%
50 to 59	24%	22%	23%
60 and over	8%	9%	9%
Female			
	77%	70%	72%

**Figure 1: Which problems are among the 5-6 most serious?
Results from three recent surveys of different populations***



*Note: Loss of human rights, conflict within leadership, other problems, and "hard to say" received 4% or lower in all surveys and are not shown.

Figure 2: Percent citing HIV/AIDS as one of the top problems in Russia, by institution type and regional prevalence

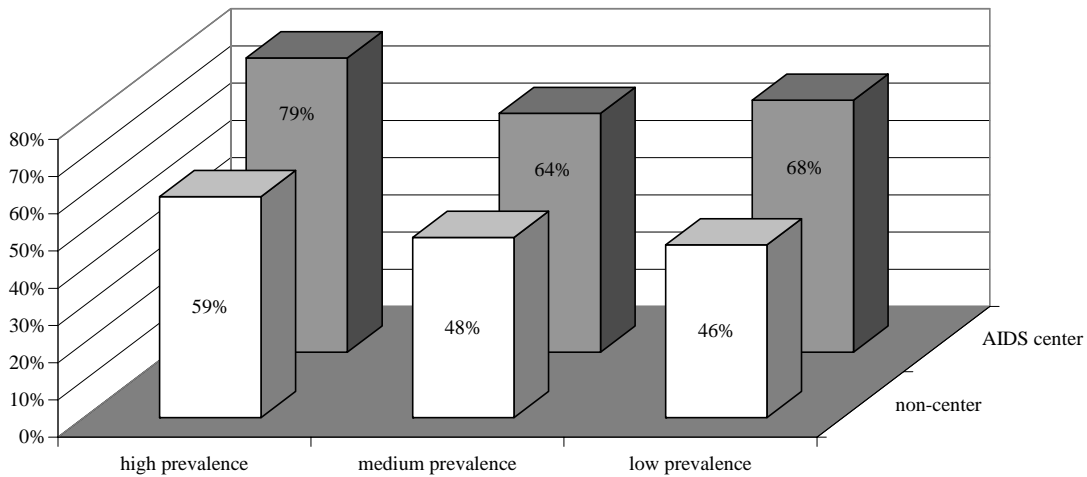


TABLE 2. Which is the most, second most, and third most serious health problem in Russia?

The most serious health problem*			
	<i>AIDS Center</i>	<i>Non- Center</i>	<i>Overall</i>
Alcoholism	23%	27%	26%
Cancer	18%	23%	21%
Cardio-vascular disease	22%	20%	21%
HIV/AIDS	19%	13%	15%
Narcotics use	11%	10%	10%
Tuberculosis	4%	2%	3%
Hepatitis	2%	2%	2%
Poor child nutrition	1%	2%	1%
Accidents	0%	1%	1%
Tobacco smoking	0%	0%	0%

One of the three most serious health problems*			
	<i>AIDS Center</i>	<i>Non- center</i>	<i>Overall</i>
HIV/AIDS	66%	51%	56%
Cardio-vascular disease	52%	49%	50%
Cancer	44%	52%	49%
Alcoholism	44%	51%	49%
Narcotics use	42%	44%	43%
Tuberculosis	31%	17%	22%
Hepatitis	10%	11%	10%
Poor child nutrition	4%	7%	6%
Tobacco smoking	3%	5%	5%
Accidents	2%	5%	4%

*Note: suicide, diabetes, other infectious diseases, and other problems had entries below 3% in all columns and are not shown.

Figure 3: Percent citing HIV/AIDS as the most serious health problem in Russia, by institution type and regional prevalence

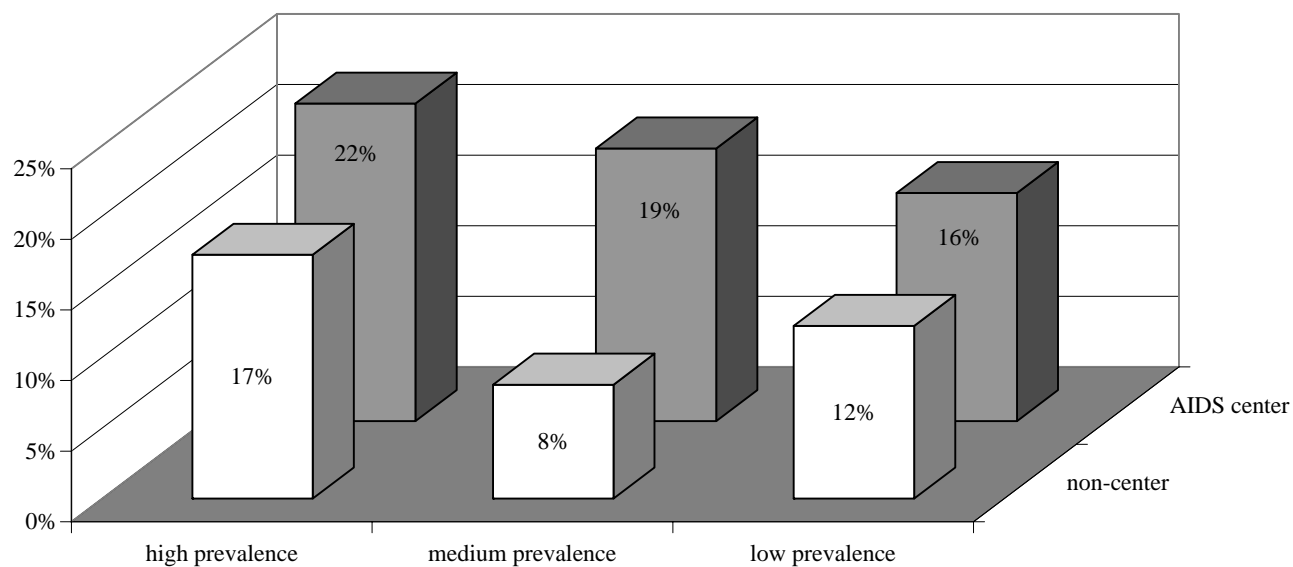


TABLE 3. Severity and Meaning of the Epidemic

	Fully agree	Mainly agree	D/K	Mainly disagree	Fully disagree
<i>Statements regarding the severity of the epidemic:</i>					
D5a. The fight against HIV/AIDS should be our government's most important priority	22%	42%	2%	26%	8%
D5b. HIV/AIDS is important, but Russia has other more serious health problems	49%	36%	2%	11%	2%
D5c. No reason to treat AIDS differently than other serious health problems	35%	27%	3%	17%	18%
D35e. The HIV/AIDS epidemic poses a serious threat to our national security	59%	29%	2%	8%	2%
D36a. The AIDS epidemic has already reached catastrophic proportions in Russia	30%	35%	4%	26%	5%
D36b. Unless the government takes more decisive preventive measures 5% or more of Russia's population will be HIV+ by 2007	32%	42%	8%	14%	3%
D36f. Most Russian politicians underestimate the seriousness of the AIDS epidemic	57%	33%	4%	4%	2%
D36c. AIDS will not be widespread in Russia because it mainly affects drug addicts	2%	6%	2%	36%	54%
<i>Statements regarding the meaning of the epidemic:</i>					
D35a. HIV was brought to Russia by foreigners in order to weaken the Russian people	3%	7%	4%	30%	56%
D35c. HIV/AIDS would be as big a problem even if the Soviet Union did not collapse	47%	32%	3%	14%	4%
D35b. The spread of HIV/AIDS reflects the moral and cultural decline of our people	41%	40%	1%	11%	6%

Figure 4: Percent who agree that the government should make fighting HIV/AIDS its top priority, by institution type and regional prevalence

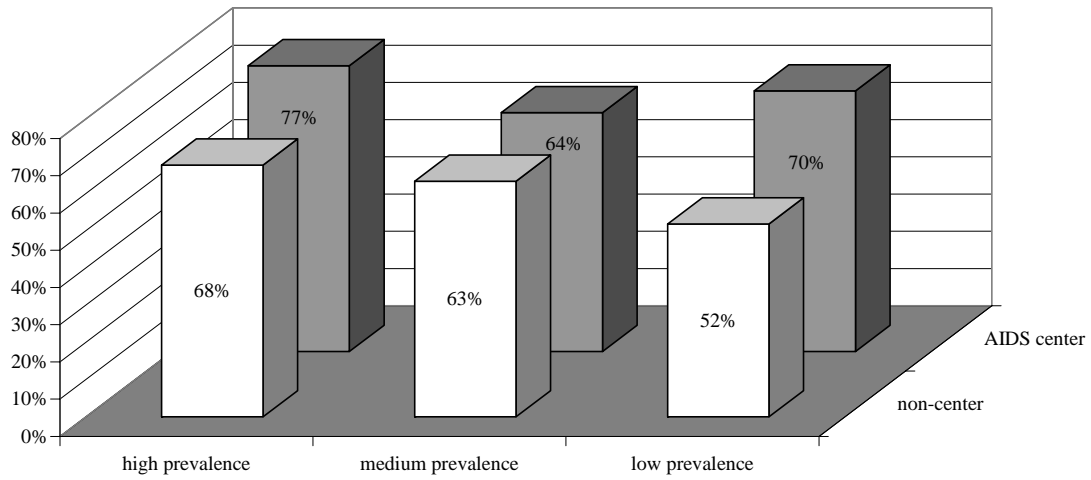


Figure 5: Percent who agree that HIV/AIDS is important but Russia has other more serious health problems, by institution type and regional prevalence

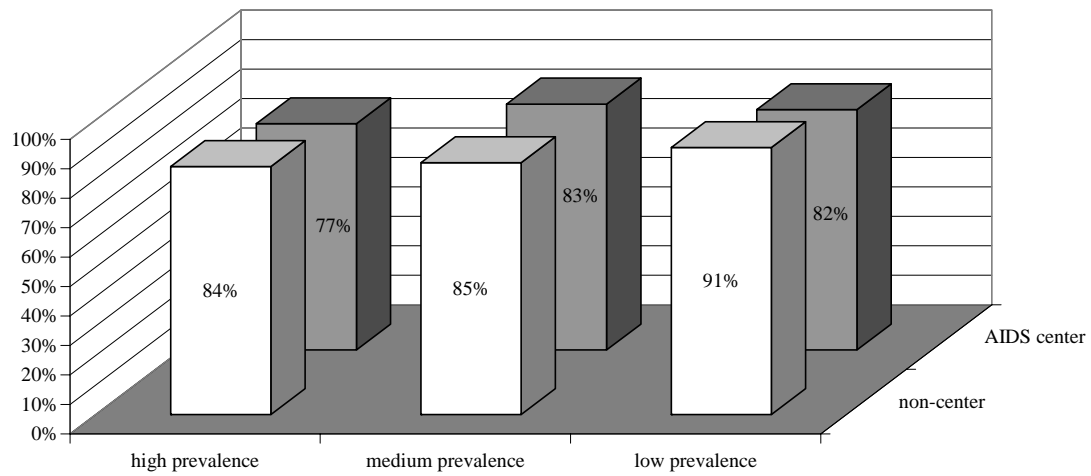


Figure 6: Percent who agree that there is no reason to treat HIV/AIDS differently than other serious health problems, by institution type and regional prevalence

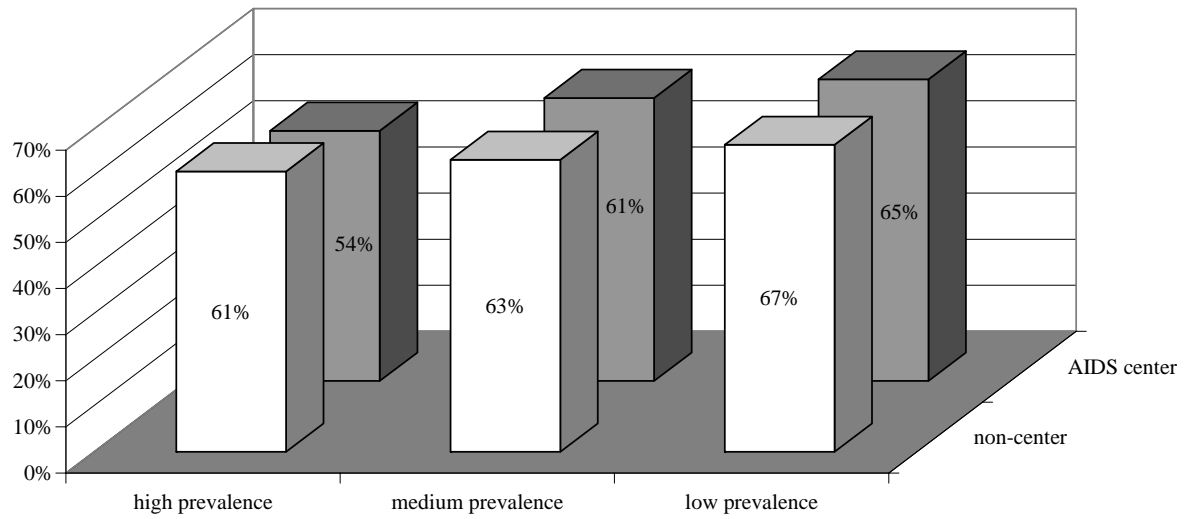


TABLE 4. Frequency of contact with HIV+ patients, AIDS patients, and AIDS deaths

D21. How often in the last year have you treated patients with HIV?

	<i>High prevalence</i>		<i>Medium prevalence</i>		<i>Low prevalence</i>	
	Non-center	Center	Non-center	Center	Non-center	Center
Daily	18%	74%	7%	67%	1%	36%
Weekly	17%	13%	15%	15%	4%	36%
Monthly	28%	8%	30%	6%	21%	17%
Less than monthly	31%	3%	38%	5%	51%	6%
Never	6%	2%	10%	7%	22%	5%

D22. How often in the last year have you treated patients with AIDS?

	<i>High prevalence</i>		<i>Medium prevalence</i>		<i>Low prevalence</i>	
	Non-center	Center	Non-center	Center	Non-center	Center
Daily	5%	16%	3%	13%	0%	5%
Weekly	3%	27%	5%	13%	0%	7%
Monthly	12%	23%	10%	17%	5%	28%
Less than monthly	32%	16%	32%	29%	28%	28%
Never	47%	18%	50%	27%	67%	32%

D23. How many of your patients have died from AIDS-related complications?

	<i>High prevalence</i>		<i>Medium prevalence</i>		<i>Low prevalence</i>	
	Non-center	Center	Non-center	Center	Non-center	Center
None	50%	12%	51%	19%	67%	18%
1 to 10	23%	43%	23%	38%	18%	52%
11 to 20	4%	12%	3%	12%	0%	18%
21 to 50	2%	10%	2%	8%	0%	3%
51 to 100	1%	9%	2%	3%	0%	1%
More than 100	1%	1%	0%	6%	0%	0%
Hard to say	18%	12%	18%	13%	14%	9%

TABLE 5. ARVs: effectiveness and treatment standards

	<i>AIDS Center</i>	<i>Non-AIDS Center</i>
D11. What are ARVs?		
Never heard of them	1%	16%
Treat a wide spectrum of viruses, including HIV	25%	51%
Treat only HIV	73%	30%
Treat a wide spectrum of viruses, but not HIV	1%	4%
<i>Among those who have heard of ARVs...</i>		
D12. Does research show ARVs to be effective treatments for HIV?		
They are effective	87%	36%
They are not effective	1%	4%
Research is inconclusive	8%	30%
I don't know the research findings	4%	30%
D18. How long can uninterrupted treatment with ARVs delay death from HIV-related complications?		
Indefinitely/more than ten years	61%	38%
From 4 to 10 year	22%	25%
From 1 to 4 years	7%	10%
Less than 1 year	1%	1%
Not at all	1%	4%
Hard to say	10%	22%
D19. What level of compliance with ARV treatment regime is necessary for it to be effective?		
100% compliance	78%	61%
80% or lower	1%	6%
From 81% to 95%	2%	4%
At least 95% compliance	16%	12%
No level of compliance makes ARVs effective	0%	1%
Hard to say	3%	16%
D23. How important is uninterrupted treatment for ARVs to be effective		
It is important that ARV treatment be uninterrupted	28%	18%
It is good to give patients breaks from ARVs	17%	15%
Every case is different and we cannot generalize	49%	46%
Hard to say	6%	21%
D27. How often do you monitor whether your HIV+ patients follow the treatment you prescribe?		

Always	62%	44%
Sometimes	17%	14%
Not very often	11%	15%
Never	10%	27%

TABLE 6. Access to ARVs*Among those who have heard of ARVs...*

D13. How available are ARVs in your locality?	Overall	High prevalence regions	Middle prevalence regions	Low prevalence regions
There is a sufficient supply of ARVs for all who need them	19%	16%	15%	28%
ARVs are widely available, but not in sufficient quantity	27%	32%	27%	20%
ARVs can sometimes be obtained, but only episodically	19%	21%	20%	14%
ARVs are available in my locality, but there is no need for them	1%	1%	0%	2%
ARVs are not available in my locality, despite the need for them	8%	12%	8%	4%
I do not know how available ARVs are in my locality	26%	18%	29%	32%
D14. How many patients receive ARVs for free?				
All patients who need ARVs receive them for free	50%	48%	52%	50%
Some patients receive ARVs for free and some pay	24%	28%	22%	21%
Only patients who pay receive ARVs	7%	8%	7%	6%
Hard to say	19%	16%	19%	23%
D15. How available are ARVs in these sites?				
Federal or oblast AIDS Centers	90%	93%	88%	89%
Other state clinics and hospitals	15%	14%	19%	13%
Private clinics	9%	10%	11%	6%
Independent pharmacies	13%	16%	12%	11%

TABLE 7. Treatment components in theory and practice

D24. How important are the following for successful treatment of HIV?

	Indispens- able	Important, but not indispens- able	Not important, but useful	Not useful	Hard to say
Support groups	60%	28%	8%	2%	2%
Psychological counseling	77%	17%	5%	1%	1%
Monthly monitoring of T-cells	42%	32%	10%	4%	12%
Monthly monitoring of viral load	34%	32%	11%	5%	18%

D25. What percentage of HIV patients receive the following in your establishment?

	All of them	Most of them (75% or more)	From 50% to 75%	Fewer than 50%	None
Support groups	9%	6%	6%	36%	43%
Psychological counseling	26%	10%	8%	27%	29%
Monthly monitoring of T-cells	11%	6%	6%	26%	52%
Monthly monitoring of viral load	7%	3%	5%	24%	60%

D26. If you treat HIV+ patients, how often do you usually meet with them?

	Center	Non-center	Overall
At least once a month	22%	41%	34%
Every other month	10%	11%	11%
Every 3-6 months	63%	22%	38%
Once a year	3%	13%	9%
Less than once a year	1%	12%	8%

TABLE 8. Needs and personal safety**D9. How often does your establishment experiences shortages of the following (if they are needed)?**

	Always	Often	Sometimes	Rarely	Never
Latex gloves	5%	7%	12%	10%	67%
Disposable syringes	4%	4%	7%	8%	78%
Medicine	12%	22%	25%	16%	26%
Blood supply	10%	15%	19%	15%	41%

	<i>Center</i>	<i>Non-center</i>	<i>Overall</i>
D8. Does your establishment have a sufficient number of doctors?			
Yes	53%	64%	60%
No	47%	36%	40%

D10. Do you have a personal supply of medicine, in case your establishment runs out?

Yes	15%	21%	19%
No	85%	79%	81%

D29. How much do you think your risk of getting HIV is elevated by treating HIV+ patients?

Treating HIV+ patients does not elevate the risk of getting HIV	35%	15%	22%
Treating HIV+ patients might elevate the risk, but not by much if standard practices in my establishment are followed	60%	58%	59%
Treating HIV+ patients substantially increases the risk in the conditions of my establishment	4%	24%	17%
Hard to say	1%	3%	2%

D42. How much do you worry personally about getting HIV?

A great deal	7%	24%	18%
Some	36%	43%	41%
Very little	33%	21%	25%
Not at all	24%	12%	16%

D43. How often, if at all, have you been tested for HIV?

Never	3%	6%	5%
Once	2%	7%	6%

Several times, but irregularly	5%	16%	12%
Regularly	89%	71%	77%

TABLE 9. Doctor and patient

	<i>Center</i>	<i>Non-center</i>	<i>Overall</i>	
D28. The government should pay for ARV treatment for HIV+ patients who are...				
Homosexuals	69%	54%	59%	
Children	100%	99%	99%	
Prisoners	76%	70%	72%	
Drug addicts	57%	58%	57%	
Prostitutes	64%	52%	56%	
Women/men who infect their spouses	87%	73%	77%	
Patients infected via blood transfusion	99%	98%	99%	
All of these groups	53%	44%	47%	
D30. Is it okay for a doctor to refuse treatment to an HIV+ patient?				
It is completely acceptable	2%	3%	3%	
It is sometimes acceptable	9%	22%	18%	
It is never acceptable	88%	72%	77%	
Hard to say	1%	3%	3%	
D31. Have you heard of doctors refusing to treat HIV+ patients in your establishment?				
Have heard of many such cases	1%	1%	1%	
Have heard of a few cases	5%	11%	9%	
Have not heard of any cases	94%	88%	90%	
D32. What do you think is the main reason doctors sometimes refuse to treat HIV+ patients?				
Fear of contracting HIV	55%	55%	55%	
No experience treating HIV/fear of error	17%	14%	15%	
Sharp hostility toward HIV+ patients	6%	4%	5%	
Other reason	10%	4%	6%	
I don't think doctors ever refuse	10%	19%	16%	
Hard to say	2%	3%	3%	
D45. How many doctors in your establishment demand extra payments from patients?				
Half or more	0%	2%	1%	
Only a few	2%	13%	10%	
None	91%	71%	78%	
Hard to say	6%	13%	11%	
D41. Should a doctor have a right or a duty to disclose an HIV diagnosis to the following?				
	Should have the right to disclose	Has a duty to disclose	Should have no right to disclose	Hard to say
Parents of patients under 18	37%	49%	12%	2%
Spouse of the patient	33%	33%	30%	4%
Employer of the patient	6%	2%	87%	5%

Director of the patient's school (if student)	6%	3%	88%	4%
The local press	1%	1%	96%	2%
Caregivers of the patient	35%	32%	28%	5%

TABLE 10. Factors behind Russia's health problems and HIV/AIDS**D3. The most important cause of Russia's health problems**

	<i>Center</i>	<i>Non-center</i>	<i>Overall</i>
Inadequate financing of health care system	46%	48%	47%
Low salaries of doctors	22%	26%	25%
Inaccessibility of health care for the majority	7%	6%	6%
Poverty	7%	5%	6%
Poor health education of the population	6%	5%	5%
Moral/cultural decline	3%	2%	3%
Inadequate training of doctors	2%	3%	2%
Ecological problems	2%	2%	2%
Corruption in the health care system	2%	2%	2%
Poor diet of the population	1%	1%	1%
Other	1%	1%	1%
Growth of private medical practice	1%	0%	0%

One of the three most important causes of Russia's health problems

Inadequate financing of health care system	82%	82%	82%
Low salaries of doctors	56%	58%	57%
Inaccessibility of health care for the majority	40%	33%	36%
Poor health education of the population	31%	31%	31%
Poverty	23%	22%	22%
Ecological problems	17%	15%	16%
Inadequate training of doctors	14%	15%	15%
Moral/cultural decline	16%	13%	14%
Poor diet of the population	7%	14%	11%
Corruption in the health care system	9%	10%	10%
Growth of private medical practice	2%	3%	3%
Other	1%	2%	2%

D4/D6. Does the government spend enough on health care/the fight against AIDS?

	<i>Health care: overall</i>	<i>AIDS: center doctors</i>	<i>AIDS: non- center doctors</i>
Government spends enough	2%	11%	16%
Government should spend more	96%	83%	70%
D/K	2%	6%	14%

D7. Irrespective of the level of spending, is the government's program to fight AIDS adequate?

Center *Non-center*

The program is basically adequate	21%	16%
The program needs fundamental changes	70%	64%
Hard to say	8%	20%

TABLE 11. Specific policy measures

D38. Should the government take the following steps to fight the spread of AIDS?

	Definitely should	Probably should	D/K	Probably should not	Definitely should not
Free needle exchange for intravenous drug users	41%	33%	3%	14%	9%
Isolate HIV-positive people from others	2%	7%	3%	27%	60%
Legalize methadone treatment for heroin addicts	11%	22%	23%	17%	26%
Introduce sex education into the curriculum for 6th-8th graders	65%	27%	2%	4%	2%
Legalize prostitution	18%	29%	12%	18%	23%
Demand that all foreigners entering the country show proof they are HIV-negative	60%	18%	3%	14%	5%
Conduct a campaign promoting abstinence prior to marriage	56%	27%	3%	10%	4%
Conduct a campaign promoting sexual fidelity within marriage	54%	29%	5%	8%	5%
Strengthen the penalties for illegal drug use	33%	28%	7%	22%	11%
Conduct a wide campaign promoting the use of condoms	69%	25%	2%	3%	1%

D40. Have you received enough training in the area of epidemiology and/or prevention of AIDS, or would you like more?

Received enough	28%
Want more	72%

D44. How much information on HIV do you receive from the following sources?

	a lot	some, but not enough	a little	none
Journal articles	27%	49%	22%	3%
Websites	11%	19%	24%	46%
List-servs	5%	12%	21%	62%
Conferences, seminars	29%	49%	17%	4%
Special courses	26%	45%	20%	8%
Mass media	11%	22%	53%	14%
Informal discussions with colleagues	26%	31%	36%	7%

TABLE 12. Views regarding role of the West in Russia's fight against HIV/AIDS

Accept Western assistance/advice?

	Fully agree	Mainly agree	D/K	Mainly disagree	Fully disagree
D35d. Foreigners who finance Russian organizations that fight the spread of AIDS only want to help Russia	30%	45%	8%	14%	3%
D35f. Russian can learn lessons from the experiences of other countries in the fight against AIDS	72%	22%	2%	3%	1%
D36d. Leaders of international health organizations like WHO or UNAIDS often exaggerate the extent of AIDS in Russia	3%	12%	11%	42%	32%
D36e. Our government is capable of controlling the spread of AIDS without advice from abroad	12%	25%	6%	35%	23%

D37. Should Russia deal with HIV/AIDS independently or accept foreign assistance?

should accept foreign assistance	77%
should not accept foreign assistance	11%
hard to say	12%

TABLE A1:
Multivariate models

	Cites AIDS as one of top problems			Cites HIV/AIDS as the top health problem			Says that ARVs are effective			100% compliance with ARV necessary		
	B		RSE	B		RSE	B		RSE	B		RSE
Medium prevalence	-.444	**	.155	-.557	**	.212	-.108		.179	-.342	**	.158
Low prevalence	-.468	**	.160	-.329		.214	-.178		.187	-.376	**	.167
AIDS Center	.602	**	.191	.325		.259	1.750	**	.211	.477	**	.190
Cohort (23 to 29)												
30 to 39	-.802	**	.237	-.728	**	.289	-.449	*	.271	-.346		.237
40 to 49	-.526	**	.229	-.558	**	.268	-.596	**	.271	-.507	**	.229
50 to 59	-.606	**	.242	-.692	**	.297	-.239		.274	-.362		.241
60 and older	-.100		.302	-.732	**	.370	-.968	**	.338	-.601	**	.296
received training	.025		.138	.177		.194	.456	**	.157	.257	*	.136
Woman	.663	**	.146	.214		.201	.357	**	.160	.349	**	.145
Orthodox	-.039		.132	-.256		.174	.133		.157	-.022		.133
Ethnic Russian	-.370	**	.176	-.349		.219	.386	*	.204	.247		.179
Frequency treating HIV patients	-.048		.044	.001		.063	-.121	**	.049	-.133	**	.044
Frequency treating AIDS patients	-.016		.050	-.041		.067	-.129	*	.066	-.012		.052
Specialty (infectionists)												
Dermatologist, venerologist	.457	**	.216	.352		.269	-		.255	-.493	**	.213
Narcologist	.074		.234	-.666	*	.375	-		.264	-.691	**	.237
Gynecologist	.174		.213	.163		.267	-		.237	-.129		.212
Pulmonary specialist	-.139		.273	-.586		.440	1.568	**	.292	.224		.270
Epidemiologist	.569	**	.284	.323		.328	-.624	**	.360	.422		.308
Other	.186		.218	-.177		.296	-.478		.249	-.136		.215
Constant	1.044	**	.454	-.236		.584	-.848	**	.543	1.744	**	.466
Regression type	Logit			Logit			Logit			Logit		
N	1193			1193			1193			1193		
Log-likelihood	-758.9			-478.5			-589.1			-730.5		

TABLE A1 (cont.)
Multivariate models

	Importance of support groups ^A		Anti-discrimination scale		Never ok to refuse treatment		Want foreign assistance	
	B	RSE	B	RSE	B	RSE	B	RSE
Medium prevalence	.007	.155	.273 *	.140	-.115	.187	-.527 **	.180
Low prevalence	.704 **	.160	.360 **	.144	-.426 **	.190	-.337 *	.192
AIDS Center Cohort (23 to 29)	.146	.181	.280	.178	.714 **	.245	-.073	.212
	-							
30 to 39	.003	.206	-.029	.200	.226	.243	.270	.277
40 to 49	.152	.200	-.219	.194	.306	.232	-.390	.254
50 to 59	.157	.220	-.161	.207	.714 **	.265	-.635 **	.264
	-							
60 and older	.342	.287	.036	.252	.472	.325	-.606 *	.320
	-							
Received training	.278 **	.136	.022	.127	.269 *	.155	.119	.156
	-							
Woman	.383 **	.140	-.286 **	.131	.183	.163	-.188	.168
	-							
Orthodox	.115	.126	.112	.120	.033	.153	-.039	.148
	-							
Ethnic Russian	.059	.174	.322 **	.163	.482 **	.189	.111	.190
	-							
Frequency treating HIV patients	.060	.043	-.045	.039	-.009	.054	-.051	.049
	-							
Frequency treating AIDS patients	.007	.046	.041	.044	-.013	.067	-.029	.057
Specialty (infectionists)								
Dermatologist, venerologist	-							
	.251	.208	-.298	.204	-.196	.253	-.067	.244
	-							
Narcologist	.441 **	.224	-.428 *	.220	-.413	.265	-.147	.258
	-							
Gynecologist	.490 **	.207	-.523 **	.197	-.491 **	.249	.282	.247
	-							
Pulmonary specialist	.387	.276	.253	.236	.151	.332	.141	.305
Epidemiologist	.147	.230	.001	.227	.386	.408	-.015	.287
	-							
Other	.534 **	.202	-.518 **	.187	-.398	.254	.172	.251
Constant			3.113 **	.432	1.036 *	.578	2.470 **	.544
Regression type	Ordinal logit		OLS		Logit		Logit	
N	1168		1186		1193		1193	
R-squared or Log-likelihood	-1072.3		.033		-602.1		-621.3	

^ALower values denote more important.

	Doctor survey, July- September 2005	Youth survey, June 2005	National survey, July 2004
Spread of AIDS	58%	36%	13%
Poverty	55%	40%	55%
Spread of drug abuse	49%	47%	27%
Crisis in morals, culture, morality	47%	17%	17%
Corruption, bribery	41%	30%	37%
Worsening situation of the environment	33%	29%	20%
More inequality, unfair pay distribution	30%	18%	26%
Economic crisis	26%	18%	22%
Inaccessibility of medical care	26%	17%	31%
Weakness, helplessness of the government	24%	9%	10%
Lack of prospects for the young	20%	19%	19%
Growing cost of higher education	20%	33%	26%
Growth of crime	18%	31%	27%
Terrorist acts	17%	24%	17%
Price increases	17%	37%	48%
Growth of unemployment	17%	40%	41%
Nationalism, ethnic tensions	13%	9%	8%
Inattention to problems affecting seniors	9%	8%	10%
Military conflict in Chechnya	5%	11%	11%
Mistreatment and violence by the police	4%	16%	11%
Delays in wages, pensions, etc.	2%	9%	8%
Restrictions on civil rights	3%	2%	2%
Conflicts within the leadership of the country	2%	2%	2%
Other problems	2%	1%	2%
Hard to say	0%	1%	1%

fearaids				
	high prevalence	medium prevalence	low prevalence	
non-center	0.593525	0.483871	0.464029	
AIDS center	0.790698	0.641379	0.676923	
aidstop				
	high prevalence	medium prevalence	low prevalence	
non-center	0.172662	0.080645	0.122302	
AIDS center	0.224806	0.193103	0.161539	
aidsno1				
	high prevalence	medium prevalence	low prevalence	
non-center	0.676259	0.633065	0.517986	
AIDS center	0.767442	0.641379	0.7	
othmore				
	high prevalence	medium prevalence	low prevalence	
non-center	0.841727	0.854839	0.906475	
AIDS center	0.767442	0.834483	0.815385	
nodiff				
	high prevalence	medium prevalence	low prevalence	
non-center	0.607914	0.633065	0.665468	
AIDS center	0.542636	0.613793	0.653846	

0.041309

Has other work aside from main job			
<i>Yes, regular work</i>	22%	21%	26%
Yes, occasional work	14%	15%	12%
Ethnicity			
Russian	85%	84%	85%
Tatar	3%	3%	4%
Ukrainian	3%	3%	3%
Other	8%	9%	7%
Refuse to say	1%	1%	1%
Religion			
No religion	29%	28%	30%
Russian Orthodox	61%	62%	58%
Islam	3%	3%	2%
Other religion	2%	1%	2%
Hard to say	6%	6%	7%
Mean Income (rubles per month)	6205	6235	6143
SD Income	4036	4219	3646
Mean hours worked per week	44	47	39
SD hours worked	15	16	9