

Evaluation of outpatient services in the Brazilian Unified National Health System for persons living with HIV: a comparison of 2007 and 2010

Avaliação dos serviços ambulatoriais de assistência a pessoas vivendo com HIV no Sistema Único de Saúde: estudo comparativo 2007/2010

Evaluación de los servicios ambulatorios de asistencia a personas viviendo con VIH en el Sistema Único de Salud: estudio comparativo 2007/2010

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Abstract

Health services play a crucial role in reaching the 90-90-90 target of controlling the HIV epidemic. This study evaluates the organization of Brazilian health services in improving, monitoring, and retention in HIV care and adherence support. Percentage variation (PV) was used to compare the responses by services to an evaluation questionnaire on organizational quality (Quali-aids) in 2007 and 2010. The study analyzed the 419 services that completed the questionnaire in 2007 (83.1% of respondents) and 2010 (63.6%). Management actions of retention and support although increased in the period, but remained at low rates, for example: systematic meetings for case discussion (32.7% in 2010; PV = 19.8%) and recording of missed medical appointments (35.3%; PV = 36.8%). Patient care actions related to adherence to ART remained largely exclusive to the attending physician. The supply of funds and resources from the Federal Government (medicines and specific HIV tests) remained high for the vast majority of the services (~90%). It will not be possible to achieve a significant decrease in HIV transmission as long as retention in treatment is not a priority in all the health services.

Ambulatory Care; Acquired Immunodeficiency Syndrome; Quality of Health Care; Program Evaluation

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Introduction

In Brazil, since 2013, the clinical protocol for AIDS treatment recommends initiating antiretroviral therapy for all people with diagnosed HIV infection, regardless of their immune or clinical status ¹. The adoption of this protocol is based on evidence of the clinical benefit of early treatment ² and a reduction of more than 90% in viral transmission by treated persons ³.

According to the 90-90-90 target proposed to countries by the Joint United Nations Program on HIV/AIDS (UNAIDS) ⁴, by 2020: 90% of all persons living with HIV will know their HIV status; 90% of all people with diagnosed HIV infection will receive sustained antiretroviral therapy; and 90% of all people receiving antiretroviral therapy (ART) achieve viral suppression. Adopted by Brazil as well, the target is currently the international parameter for assessing national responses to AIDS. The target is monitored with an epidemiological model in which the stages appear as a cascade. Each stage appears as a “step”, and the theoretical development is called the continuum of HIV care.

Proposed in the United States in 2013, the continuum of care model begins with the estimated number of infected individuals. The following stages sequentially estimate the proportion of diagnosed individuals engaged with a health service; the proportion retained, i.e., that remained in follow-up; those on antiretroviral therapy; and finally, those with complete viral suppression ⁵.

The Brazilian Ministry of Health estimated that in 2015 there were approximately 827 thousand people with HIV infection in the country ⁶, of whom 715 thousand (87%) knew their serological status, of whom 677 thousand (95% of those diagnosed) were engaged with some health service, i.e., had done at least one viral load test or CD4 T-lymphocyte count, or had at least one antiretroviral prescription dispensed. Of this group, 565 thousand (83.5% of those engaged with services) remained in follow-up (had at least two viral load tests or two CD4 counts or antiretroviral prescriptions dispensed in the last 100 days of the year), of whom 455 thousand (80.5% of those retained) were in antiretroviral therapy, of whom 410 thousand (90% of those treated) had reached a viral load of less than one thousand copies per mL. A viral load of less than a thousand copies, although not considered “complete suppression” (that is, currently defined as below the limit of detection), nevertheless represents an acceptable limit for reduction of potential transmission ⁷.

The largest estimated “losses” in the continuum of care thus occur in the stages of diagnosis (13.5% of infected individuals: 112 thousand persons); retention (16.5% of those engaged with services: 112 thousand persons that dropped out or did not even initiate follow-up); and treatment (19.5% of those retained: 110 thousand persons who had done a viral load or CD4 count during the reference period, but had received antiretroviral drugs).

If diagnosis involves a complex network of psychosocial dimensions in which healthcare services represent one of the links – obviously important, but with limited impact, in the other stages the role of healthcare services acquires greater importance. As demonstrated in other studies – that seek to qualify and/or assess the impact of actions by healthcare services – in the stages of retention, treatment, and suppression, the role of healthcare services is crucial for the development of activities that improve patient retention in the service, adherence to ART, and reduction in viral load ^{8,9,10}.

Brazil currently has 1,024 services in the Unified National Health System (SUS) and registered with the Ministry of Health (Qualiaids. Apresentação. <http://www.qualiaids.fm.usp.br/>, accessed on 06/Aug/2015) to provide outpatient follow-up of persons with HIV. Through this network of care operating universal access to antiretroviral therapy – the pillar of the Brazilian response to AIDS – sufficient performance is expected to positively impact the continuum of care for HIV, approaching the 90-90-90 target.

The services in this network of care, mostly implemented in preexisting structures in the SUS, are quite heterogeneous in terms of size (the number of patients varies from one to more than 5,000) and institutional format (exclusive STD/AIDS services, specialty outpatient clinics and hospitals, and primary care units) ¹¹. Federal Government is responsible for establishing clinical protocols and supplying antiretroviral drugs and specific tests (viral load, CD4, and genotyping) ¹². The provision and maintenance of all the other resources, as well as the other processes in organization of care, depend on the state, municipal, and local management levels of the SUS.

The first systematic evaluation of the organization of care in these services was in 2001–2002, including 322 services (95.8% of those registered in the Ministry of Health), located in seven states.

The evaluation used the pre-validated instrument *Qualiaids*, a questionnaire that investigates the organizational quality of the care delivered by the service¹³, and identified a contrast between the provision of resources at the Federal level (viral load and CD4 tests and antiretroviral drugs) and the problematic availability of resources that depend on the infrastructure and organization of the SUS at the local level.

In 2007 and 2010, the *Qualiaids Questionnaire* was completed by 79.3% (n = 504) and 92.6% (n = 659) of the country's services, and the comparison of the results related to the set of services is available in a report sent to the Ministry of Health in 2012^{13,14}. The current article compared the answers directly related to the stages of retention and treatment in the services that participated in the national applications of the *Qualiaids Questionnaire* in 2007 and 2010.

Methodology

Qualiaids Questionnaire: structure and applications

The questionnaire contains 107 multiple-choice questions on structure and process of care, classified in three theoretical dimensions: organization of processes of care, technical coordination of the work, and availability of resources. The questionnaire was completed in the online system by the person technically in charge of the service, and the questions allowed single or multiple answers. In the app, the services also had access to the *Guidelines for Good Practices*, referring to the instrument's questions, which could be accessed at any time¹⁵.

On both occasions, the Department of STI, AIDS, and Viral Hepatitis, Brazilian Ministry of Health asked the 27 State Coordinating Divisions of the AIDS Program to register in the *Qualiaids* system all the health services that conducted outpatient follow-up of adults living with HIV. After registering, the services were invited to complete the questionnaire using a login and password, with guaranteed confidentiality of the answers.

The services' completion of the questionnaire was monitored for three months in both 2007 and 2010, through a university-Brazilian Ministry of Health partnership. Access to and use of the database resulting from the national applications of *Qualiaids* were granted to the current article's authors as part of the technical cooperative agreement.

Study design: definition of the target measures/variables

The organizational characteristics indicating the quality of the actions related to retention, treatment, and viral load suppression, for example, prompt access to the service, can be described analytically in two poles: (a) those that sustain the set of care for all patients: availability of resources (own resources and those of the local network of care) and the work's technical coordination; (b) those sustaining the organization of care for each patient's specificities: the dynamics of the flow of patient care.

The actions most directly related to the stages of retention and treatment can thus be seen as continuous and simultaneous sets, situated in three moments: improving and monitoring (for all patients) and support (for individuals with problems identified during monitoring).

Improving involves actions, that encourage remaining in follow-up and adherence to ART for all patients; the same for monitoring, which deals with measuring the reach of these objectives. Support refers to specific actions for patients whose monitoring has identified problems with retention and/or adherence to ART.

Thus, to compare the answers related to the stages of retention and treatment, we selected 98 variables from the three theoretical dimensions of the *Qualiaids Questionnaire* to comprise indicators for the services' performance in retention and treatment.

In the dimension of availability of resources, we selected indicators related to the provision of inputs and tests by the Federal and local levels, and human resources. To assess the availability of human resources, we calculated the acceptable ratio of patients per health professional based on the empirical data from *Qualiaids* in 2010 and validation of the questionnaire's new version in 2011. The evaluation considered services that obtained the best performance measures in both 2007 and 2010,

and based on the analysis of the availability of physicians and the minimum team (nurse, psychologist, and social worker) for this set of services, we determined the acceptable ratio of patients per professional: physicians (up to 400 patients each); nurses (up to 880); psychologists (up to 920); and social workers (up to 870 patients).

In the organizational dimension of the process of care, we selected the indicators that qualify the care provided to HIV patients as they enter and remain in the service and those for improving of treatment adherence to ART. In the dimension of the work's technical coordination, we selected the indicators on continuous monitoring of the group of patients retained in the service and actions aimed at reengagement of patients that have experienced difficulties.

The analysis covered the 419 services that participated in 2007 and 2010. We compared the proportion of services that completed the questions on the selected variables, and for each variable we calculated the percentage variation (PV) between the two versions $[(P_{2010} (\% 2010) - P_{2007} (\% 2007)) / P_{2007} * 100]$, expressed with up to one decimal place. The McNemar test was used to compare the resulting proportions. PV was presented for variables that showed a significant change from 2007 to 2010 ($p < 0.05$ in the McNemar test). The analysis excluded services that did not complete the questionnaire in both 2007 and 2010.

Results

Description of services

Of the 419 services analyzed, 70% are located in municipalities with fewer than 400 thousand inhabitants (Brazilian Institute of Geography and Statistics. National Population Census 2010. <http://www.ibge.gov.br/home/estatistica/populacao/censo2010/>, accessed on 12/Mar/2015). Of the 419 services, 41.3% are outpatient services for various specialties, 35.1% are specialized care services, 12.4% are primary care services, 8.8% are outpatient departments affiliated with hospitals, and 1% failed to specify.

Table 1 shows the distribution of services by region and size. The South and Southeast regions concentrate 334 (79.7%) of the services, of which 140 (42%) are medium-size services. Medium-size services also comprise the largest share of the entire set, with 39.1% of the sample (Table 1).

Availability of resources

Eighty percent of the services maintained a seamless supply of first-line antiretroviral drugs¹ provided by the Federal government. The proportion of services was also maintained that reported the availability of two or more CD4 and viral load tests per patient/year (CD4: 2007 = 95.5%; 2010 = 97.1%, $p = 0.2295$; viral load: 2007 = 92.9%; 2010 = 94.8%, $p = 0.2559$).

Locally provided resources like medicines for primary prophylaxis of opportunistic infections, biochemical tests used for monitoring the toxicity of medicines that require faster turnaround time, and simple imaging tests were available within two weeks in 80% of the services. More complex tests and scheduling appointments with specialists were available within two weeks in fewer than half the services (Table 2).

The proportion of services with at least one infectious diseases medical specialist was maintained (2007 = 72.1%; 2010 = 75.4%, $p = 0.0869$). Services reported difficulties in supplying university-level staff (2007 = 57%; 2010 = 58.5%, $p = 0.6998$), and there was a decrease in the proportion of services that achieved an acceptable ratio of patients per professional (Table 2).

Despite the high availability of gynecologists (Table 2), there was still a low proportion of services that scheduled routine gynecology appointments, independently of immediate patient complaints (2007 = 33.4%; 2010 = 31.6%, $p = 1.00$).

Table 1

Services in the Brazilian Unified National Health System (SUS) that completed both years of the *Qualiaids Questionnaire* according to size (number of patients) and geographic region.

| Size | Region | | | | | Total [n (%)] |
|---------------------|---------|-------|-----------|-------|-----------|---------------|
| | Central | North | Northeast | South | Southeast | |
| Small (0 to 100) | 8 | 3 | 14 | 22 | 64 | 111 (26.5) |
| Medium (101 to 500) | 7 | 4 | 13 | 55 | 85 | 164 (39.1) |
| Large (\geq 500) | 5 | 3 | 22 | 35 | 67 | 132 (31.5) |
| Missing | 4 | - | 2 | 1 | 5 | 12 (2.9) |
| Total | | | | | | 419 (100.0) |

Source: Qualiaids 2007 and 2010.

Table 2

Outpatient services for persons living with HIV according to answers to questions on availability of resources. Brazil, 2007 and 2010 (N = 419).

| Resource | 2007 | | 2010 | | PV | p-value * |
|--|------|------|------|------|-------|-----------|
| | n | % | n | % | | |
| Access | | | | | | |
| Open to the public at least 5 days a week | 353 | 84.2 | 362 | 86.3 | | 0.2717 |
| Open 8 hours a day | 244 | 58.2 | 263 | 62.8 | | 0.1014 |
| Open at least 12 hours a day | 90 | 21.5 | 94 | 22.4 | | 0.7275 |
| Test results available within two weeks | | | | | | |
| CD4 T-lymphocyte count | 124 | 29.6 | 147 | 35.1 | 18.6 | < 0.05 |
| Viral load | 82 | 19.5 | 104 | 24.8 | 27.2 | < 0.05 |
| Test results available within two weeks | | | | | | |
| Upper GI endoscopy | 142 | 33.9 | 141 | 33.7 | | 1.00 |
| Computerized tomography | 82 | 19.6 | 105 | 25.1 | 28.5 | < 0.05 |
| Pap smear | 155 | 37.0 | 151 | 36.0 | | 0.7985 |
| Appointment with medical specialties within two weeks | | | | | | |
| Gynecology | 318 | 75.9 | 301 | 71.8 | | 0.1285 |
| Psychiatry | 168 | 40.1 | 128 | 30.5 | -23.9 | < 0.001 |
| Neurology | 110 | 26.3 | 82 | 19.6 | -25.5 | < 0.05 |
| Proctology | 85 | 20.3 | 62 | 14.8 | -27.1 | < 0.05 |
| Cardiology | 157 | 37.5 | 131 | 31.3 | -16.5 | < 0.05 |
| Ophthalmology | 145 | 34.6 | 116 | 27.7 | -19.9 | < 0.05 |
| General surgery | 118 | 28.2 | 103 | 24.6 | | 0.2029 |
| Ratio of patients per professional | | | | | | |
| Physician (20-hour/week contract for up to 400 patients) | 370 | 88.3 | 368 | 87.8 | | 0.4799 |
| Nurse (1 professional for up to 880 patients) | 409 | 97.6 | 335 | 79.9 | -18.1 | < 0.001 |
| Psychologist (1 professional for up to 920 patients) | 407 | 97.1 | 274 | 65.4 | -32.7 | < 0.001 |
| Social worker (1 professional for up to 870 patients) | 408 | 97.4 | 256 | 61.1 | -37.2 | < 0.001 |

PV: percentage variation.

* McNemar test.

Organization of the process of care

Patients that appeared for care for the first time were mostly seen by non-medical university-level professionals (2007 = 92.8%; 2010 = 94.7%, $p = 0.4035$). At this first visit, the attending professional referred the patient to a medical appointment on the same day in 36.3% of the services (2007 = 42.5%; 2010 = 36.3%, $PV = -14.6\%$, $p < 0.05$).

Figure 1 shows the proportion of services that conduct flow-of-care activities for patients in follow-up in the service before, during, and after medical appointments, as well as activities for patients that miss appointments or drop out of treatment. Medical appointments were scheduled at specific hours by 27% of the services (2007 = 26.7%; 2010 = 27%, $p = 1.00$).

The main activities in monitoring adherence to ART were still done predominantly by physicians, based on questions during the appointment on correct use of the medication (2007 = 79.7%; 2010 = 83.8%, $p = 0.1285$) and difficulties with side effects and dosage (2007 = 86.2%; 2010 = 88.1%, $p = 0.4452$).

Technical coordination of the work

The proportion of services that conducted systematic meetings for clinical case discussions remained less than 33% (2007 = 27.3%; 2010 = 32.7%; $PV = 19.8\%$, $p < 0.05$), despite having increased. Regularly scheduled work meetings were held more frequently (2007 = 36.6%; 2010 = 43.5%; $PV = 18.9\%$, $p < 0.05$).

For patients experiencing difficulties with antiretroviral therapy, most services reported scheduling follow-up medical appointments at shorter intervals (2007 = 88.5%; 2010 = 90.7%, $p = 0.3492$), reinforcing adherence to ART during appointments (2007 = 76.6%; 2010 = 81.1%, $p = 0.1210$), and individual orientation by other university-level health professionals (2007 = 70.4%; 2010 = 70.9%, $p = 0.9291$). Activities like referral to adherence groups and changes in treatment regimen were described by the same proportion of services (Table 3).

When patients missed their appointments, fewer than 30% of the services called them in (2007 = 26.3%; 2010 = 27.7%, $p = 0.6427$); approximately half called in patients with altered test results (2007 = 47.7%; 2010 = 53.2%, $p = 0.0884$) or with greater clinical severity (2007 = 48%; 2010 = 55.1%, $PV = 14.8\%$, $p < 0.05$). Most services referred patients between different members of the professional healthcare team (2007 = 68.7%; 2010 = 69.5%, $p = 0.8654$) in both 2007 and 2010.

Discussion

The availability of resources in the network of care depends on the services' source of financing. Like the situation already detected by Qualiaids in 2007¹³ in relation to the necessary resources for adequate care, the vast majority of services reported again in 2010 that only the Federally provided resources ensured continuous supply.

Access to medical specialists within two weeks was already problematic in 2007 and became even worse. There is probably a shortage of accredited medical specialists, or there may be other problems with regulation in the local network of care. Except for gynecology, there is no ready supply of specialists in most of the services. In addition to the shortage of physicians in the local network, there were also persistent difficulties with available hospital places. The services also faced increasing patient demand for other health staff.

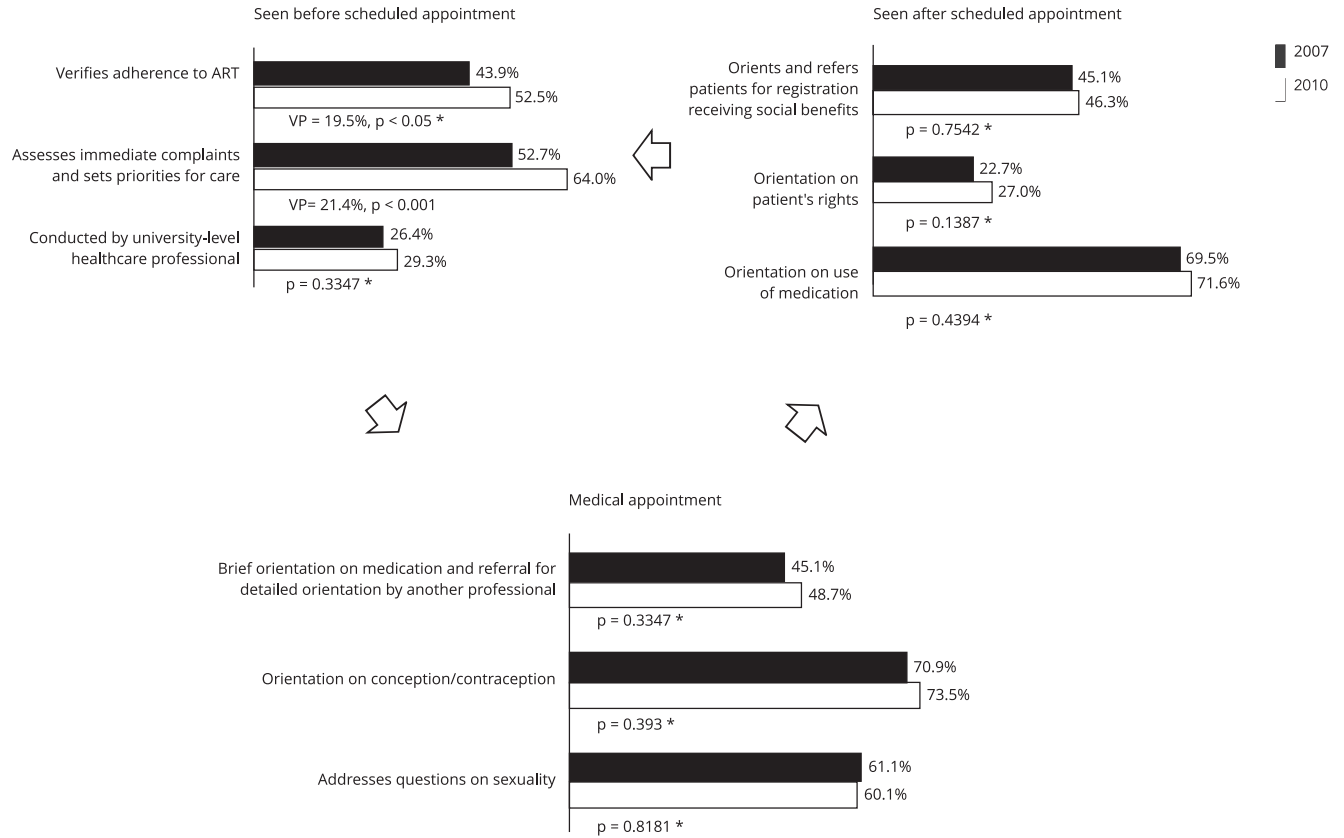
The overload on specialized services was cited as one of the reasons for the need to decentralize AIDS care to primary care services. Some Brazilian municipalities adopted the proposal by the Department of STI, HIV/AIDS and Viral Hepatitis, Brazilian Ministry of Health, in 2012, under the guideline for the expansion of early treatment¹⁶. There are still no studies evaluating the decentralization of care. Based on the data in this study, some challenges can be identified. As observed, there is a shortage of resources in the services and local networks for HIV/AIDS care, which is part of the overall shortage of resources in the local networks of services in the SUS, especially in primary care¹⁷.

The internal organizational and technical capacity of primary care services to coordinate and conduct clinical management of users with chronic diseases is also cited as a challenge for the care

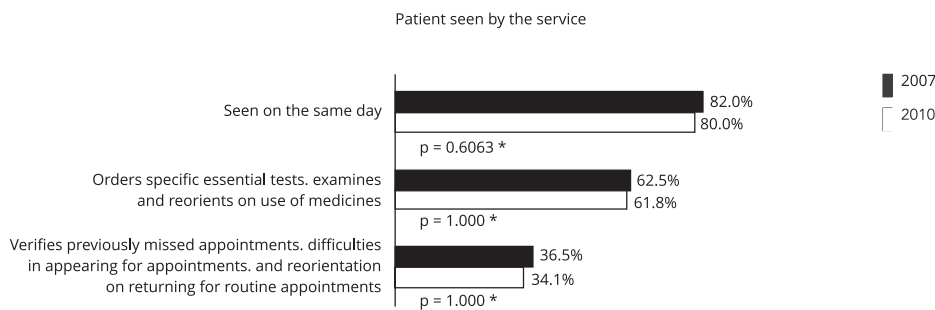
Figure 1

Proportion of services that conduct flow-of-care activities for patients with HIV/AIDS. Brazil, 2007 and 2010.

1a) Patient in follow-up



1b) Patient missed appointment or dropped out and appears at the service



ART: antiretroviral therapy; PV: percentage variation.

Source: Qualiaids 2007 and 2010.

* McNemar test.

Table 3

Outpatient services for persons living with HIV according to dimensions and actions in improving, monitoring, and retention in HIV care and adherence support. Brazil, 2007 and 2010 (N = 419).

| Technical coordination of work | 2007 | | 2010 | | PV | p-value * |
|---|------|----|------|----|------|-----------|
| | n | % | n | % | | |
| Patients seen again without extra appointment if they go without medication for unforeseen reasons | 211 | 50 | 190 | 45 | | 0.1147 |
| At start of antiretroviral therapy, patient does follow-up with a university-level healthcare professional within two weeks | 265 | 63 | 270 | 65 | | 0.7364 |
| When the interval between appointments exceeds 30 days, the patient: | | | | | | |
| Is seen by nurse or pharmacist, and after orientation, receives previously prescribed medication | 116 | 28 | 103 | 25 | | 0.2712 |
| If stable, takes medication for 60 days | 116 | 28 | 136 | 33 | | 0.0850 |
| When patient experiences difficulties with antiretroviral therapy: | | | | | | |
| Referred to adherence groups | 116 | 28 | 111 | 27 | | 0.6992 |
| If possible, changes treatment regimen | 241 | 58 | 261 | 62 | | 0.1565 |
| Systematic recording of information | | | | | | |
| Missed medical appointments by patient | 158 | 38 | 192 | 46 | 21.5 | < 0.05 |
| Patient missed medical appointments | 108 | 26 | 148 | 35 | 36.8 | < 0.05 |
| Use of patient chart | | | | | | |
| Used by all areas of care ** | 160 | 38 | 181 | 43 | | 0.0895 |
| Care provided by non-medical university-level healthcare professionals recorded on the same patient chart | 349 | 83 | 369 | 88 | 5.8 | < 0.05 |
| Medical records made in standardized fields on chart at all appointments | 213 | 51 | 219 | 52 | | 0.6749 |

PV: percentage variation.

* McNemar test;

** Refers to use of patient chart in services with various sectors of care, for example hospitals with various outpatient clinics.

of patients with chronic diseases in primary care. Likewise, the capacity of these services to create mechanisms of dialogue with the specialized services in the healthcare network, to establish standardization of references and flows for referral of chronic patients to specialized medical care and tests, and to coordinate shared care between services^{18,19}.

The main findings in the dimension of technical management of work relate to records, evaluation, monitoring, and planning. The single patient record has been used more frequently by all sectors of care. Even so, monitoring the patients as a whole was deficient in the outpatient services. Services failed to record important information, which interfered directly in the follow-up of results and processes. Nevertheless, the use of such information produced in the health service assists managers in process evaluation and continuous quality-of-care improvement for persons living with HIV^{20,21}.

Computerized systems can thus be used as a management support tool^{22,23}, since they allow gathering clinical and work process data, enabling managers to reassess the results achieved and to conduct the necessary interventions. As a management support tool, the Department of STI, HIV/AIDS and Viral Hepatitis, Brazilian Ministry of Health recently launched the Clinical Monitoring System (SIMC)²⁴, which allows managers to access the list of patients that have still not initiated treatment, that is, representing the treatment gap, and who require timely interventions by services.

At the level of care, prompt treatment for patients recently diagnosed and immediately referred for HIV care improves patients' engagement with the service²⁵. There was a decrease in the proportion of services where the physician sees these patients on the same day. Patients were seen in up to one week, for 45 minutes or more, but without a specifically scheduled time, in half of the services.

The establishment of flows of care is mostly the responsibility of the local manager or person in charge. The technologically complex and high-priority flows of care in Brazilian services include the improving and systematic monitoring of patients' retention in follow-up and adherence to ART. In the set of measures that can be taken by the service to encourage adherence to ART, scheduling appointments within two weeks after initiating antiretroviral therapy was maintained by fewer than half of the services. Weekly follow-up after initiation of antiretroviral therapy until the patient has

adapted is extremely important for establishing a relationship of trust, respect, and shared responsibility between the healthcare team and the patient, in order to ensure compliance with the service and treatment.

Among the services that reported conducting some form of contacting patients that had missed their medical appointment, a minority called in all such patients, and even though this proportion increased from 2007 to 2010, fewer than half of the services reported seeing missing patients on the same day when they appeared, even without an appointment. The absence in follow-up medical appointments is a predictive factor for non-adherence²⁶, and strengthening active search for patients that miss appointments in the first year of follow-up can decrease morbidity for these patients²⁷, reengage them in care²⁸, and improve their retention in the service.

Study limitations

The *Qualiaids Questionnaire* only addresses the organizational dimensions of quality. In addition, this study only considered the variables related to the analytical stages of treatment and retention, while the other stages should also be constantly assessed and monitored in the service.

Since this was a census study by adherence, 34% of the services existing in 2007 and 41% of those in 2010 were not included in the comparative analysis, since they did not complete the questionnaire both times. The characteristics of these services have been reported elsewhere by the research team¹¹. However, the distribution of the services analyzed here covers the range of locations and types of services that treat persons living with HIV in Brazil.

Although the *Qualiaids Questionnaire* maintained good discriminatory power over the last decade, the changes in the field of HIV/AIDS care indicated the need to adapt the questionnaire. Validation of a new *Qualiaids* was concluded in 2016. With Brazil's adoption of the treatment-as-prevention protocol, thousands more people are expected to initiate antiretroviral therapy. Simultaneously, the desirable increase in patients' survival should lead to greater demand for care at health services.

Thus, quality in health services should always be seen incrementally. The use of quality monitoring methodologies like *Qualiaids*, which contemplates process indicators and values the necessary conditions for continuous care of persons living with HIV, is indispensable when dealing with health-care quality improvement initiatives. Despite the limits in the range of quality dimensions in the *Qualiaids Questionnaire*, the results express an evaluation of the overall performance of care in the SUS for persons living with HIV and can be used immediately by all management levels in the program and services. However, the intended impact on quality depends on the adequate use of the results by all these management levels.

Conclusion

Our study identified persistent problems in the overall flow of care in Brazilian services, related to the organization of actions for patients' retention in the service and adherence to ART.

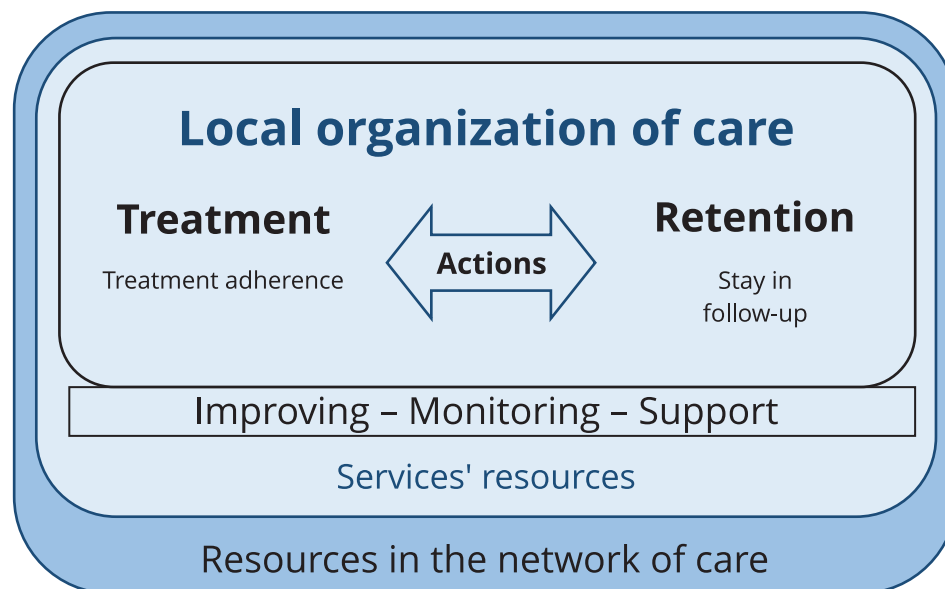
Considering the patients' differing trajectories, generally lasting years, with periods of greater and lesser adherence to ART over the course of follow-up, and that actions for improving and monitoring of retention and adherence should occur simultaneously in the service to guarantee patients' retention in follow-up, it is necessary for services to conduct improving and monitoring actions for all patients and to offer support for treatment according to individual needs.

Figure 2 thus proposes a frame of reference with all the necessary practices for services to identify and reinforce their activities in improving, monitoring, and support for retention and adherence to ART. These activities are contained in the overall organization of care and are based on adequate support in the form of resources, whether provided by the healthcare network or the service itself.

The model also seeks to "translate" the 90-90-90 target proposed by UNAIDS into concrete patient care actions. Based on the model, we hope that managers will be encouraged to assess and monitor structure and process indicators related to retention and adherence to ART in Brazilian services and that they will be able to develop strategies for search and reengagement of patients that are not in follow-up by the services, simultaneously with achievement of the 90-90-90 target.

Figure 2

Modelo de ações assistenciais para a retenção e adesão das pessoas que vivem com HIV.



Contributors

A. P. Loch and M. I. B. Nemes collaborated in the study conception, planning, analysis, interpretation, and writing and approval of the final version. M. A. Santos, A. M. Alves, R. Melchior, C. R. Basso, J. M. M. Caraciolo, M. T. S. B. Alves, E. R. L. Castanheira, W. M. E. S. Carvalho, R. T. Kehrig, and A. A. Monroe contributed to the interpretation, writing, revision, and approval of the final version.

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Resumo

O papel dos serviços de saúde é crucial para o alcance da meta 90-90-90 de controle da epidemia do HIV. O estudo avalia a organização dos serviços brasileiros nas ações de promoção, monitoramento e suporte à retenção no seguimento e apoio ao tratamento. Foram comparadas, por meio de variação percentual (VP), as respostas dos serviços a um questionário de avaliação da qualidade organizacional (Qualiaids) em 2007 e em 2010. Analisou-se os 419 serviços que responderam ao questionário em 2007 (83,1% dos respondentes) e 2010 (63,6%). Ações gerenciais relacionadas à retenção e apoio, embora incrementadas no período, permaneceram com baixa frequência, tais como: reuniões sistemáticas para discussão de casos; (32,7% em 2010; VP = 19,8%), registro de faltas em consulta médica (35,3%; VP = 36,8%). Ações assistenciais relacionadas à adesão ao tratamento medicamentoso permanecem majoritariamente exclusivas do médico. O aporte de recursos de provisão federal – medicamentos e exames específicos para HIV – manteve-se alto para a grande maioria dos serviços (~90%). Não se alcançará decréscimo significativo da transmissão do HIV enquanto a permanência no tratamento não for prioridade de todos os serviços de assistência.

Assistência Ambulatorial; Síndrome de Imunodeficiência Adquirida; Qualidade da Assistência à Saúde; Avaliação de Programas e Projetos de Saúde

Resumen

El papel de los servicios de salud es crucial para el alcance de la meta 90-90-90 de control de la epidemia de VIH. El estudio evalúa la organización de los servicios brasileños en las acciones de promoción, monitoreo y apoyo al mantenimiento del seguimiento y tratamiento. Se compararon, mediante la variación porcentual (VP), las respuestas de los servicios a un cuestionario de evaluación de la calidad organizativa (Qualiaids) en 2007 y en 2010. Se analizaron los 419 servicios que respondieron al cuestionario en 2007 (83,1% de los participantes) y 2010 (63,6%). Las acciones de gerencia, relacionadas con el mantenimiento y apoyo, aunque se incrementaron durante el período, permanecieron con baja frecuencia, tales como: reuniones sistemáticas para discusión de casos; (32,7% en 2010; VP = 19,8%), registro de faltas en consulta médica (35,3%; VP = 36,8%). Las acciones asistenciales relacionadas con la adhesión al tratamiento farmacológico continúan siendo mayoritariamente exclusivas del médico. La aportación de recursos de provisión federal -medicamentos y exámenes específicos para VIH- se mantuvo alta para la gran mayoría de los servicios (~90%). No se alcanzará un decremento significativo en la transmisión del VIH, mientras la permanencia en el tratamiento no sea una prioridad de todos los servicios de asistencia.

Atención Ambulatoria; Síndrome de Inmunodeficiencia Adquirida; Calidad de la Atención de Salud; Evaluación de Programas y Proyectos de Salud

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