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INTEGRATIVE REVIEW ARTICLE

ADHERENCE TO THE ANTIRETROVIRAL TREATMENT BY PEOPLE WITH AIDS: LITERATURE REVIEW

ADESÃO AO TRATAMENTO COM ANTIRRETROVIRAIS POR PESSOAS COM AIDS: REVISÃO DE LITERATURA

ADHESIÓN AL TRATAMIENTO PARA PERSONAS CON ANTIRRETROVIRALES CONTRA EL SIDA: REVISIÓN DE LA LITERATURA

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ABSTRACT

Objective: to characterize the scientific production on the adherence to the antiretroviral treatment in patients with Acquired Immunodeficiency Syndrome. **Method:** it is an integrative literature review, held in August 2011. We have used the following databases: Latin American and Caribbean Health Sciences (LILACS), Medical Literature Analysis and Retrieval System Online (MEDLINE), Scientific Electronic Library Online (SCIELO), Medical Publications (PUBMED) and the Nursing Database (BDENF). We aimed at answering the question << *How is characterized the scientific production in the period from 2008 to 2012?* >>. For the analysis, we made use of an adapted tool, which covered the following aspects: paper title, author names, studied intervention, results and final considerations/conclusions. The results were presented in figures. **Results:** we have found 29 studies among the full and freely available papers in the Portuguese, English and Spanish languages. **Conclusion:** the strategies used to promote the adherence to the treatment need to be improved, as well as the way of learning about the individual adherence. **Descriptors:** Acquired Immunodeficiency Syndrome; Antiretroviral; Patient's Refusal towards the Treatment.

RESUMO

Objetivo: caracterizar a produção científica sobre a adesão ao tratamento com antirretrovirais em pacientes com a Síndrome de Imunodeficiência Adquirida. **Método:** revisão de literatura integrativa, realizado em agosto de 2011. Utilizamos as seguintes bases de dados: Literatura Latino-Americana e do Caribe em Ciências da Saúde (LILACS), Literatura Internacional em Ciências da Saúde (MEDLINE), *Scientific Electronic Library Online* (SCIELO), Publicações Médicas (PUBMED) e na Base de Dados em Enfermagem (BDENF). Almejou-se responder a questão << *Como se caracteriza a produção científica no período de 2008 a 2012?* >>. Para a análise, utilizou-se um instrumento que contemplou: título do artigo, nome dos autores, intervenção estudada, resultados e considerações finais/conclusões. Os resultados foram apresentados em figuras. **Resultados:** encontrou-se 29 trabalhos entre os artigos completos disponíveis gratuitamente nos idiomas em Português, Inglês e Espanhol. **Conclusão:** as estratégias usadas para promover a adesão ao tratamento precisam ser melhoradas, bem como a maneira de se conhecer sobre a adesão individual. **Descritores:** Síndrome de Imunodeficiência Adquirida; Antirretrovirais; Recusa do Paciente ao Tratamento.

RESUMEN

Objetivo: caracterizar la literatura científica sobre la adherencia a la terapia antirretroviral en pacientes con Síndrome de Inmunodeficiencia Adquirida. **Método:** revisión integradora, realizada en agosto de 2011. Utilizamos las siguientes bases de datos: Latinoamericano y del Caribe (LILACS), Literatura Internacional en Ciencias de la Salud (MEDLINE), Scientific Electronic Library Online (SciELO), Publicaciones Médicas (PubMed) y la Base de Datos Enfermería (BDENF). Anhelaban responder a la pregunta << *¿Cómo se caracteriza la producción científica en el periodo 2008-2012?* >>. Para el análisis, se utilizó un instrumento que incluye: título del artículo, nombre del autor, la intervención del estudio, y los resultados / conclusiones finales. Los resultados se presentan en las figuras. **Resultados:** 29 estudios cumplieron entre los artículos completos idiomas gratis disponibles en Portugués, Inglés y Español. **Conclusión:** las estrategias utilizadas para promover la adhesión al tratamiento es necesario mejorar, así como la manera de saber acerca de la membresía individual. **Descriptores:** Síndrome de Inmunodeficiencia Adquirida; Antirretroviral; Negativa a la atención al paciente.

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INTRODUCTION

The non-adherence to new medications for the Acquired Immunodeficiency Syndrome (AIDS) is considered one of the most threatening hazards for the effectiveness of treatment, in the individual scope, and for the dissemination of virus-resistance, in the collective scope. This is because the new therapeutic regimens seem to require from the individual, who is obtaining a good adhesion, a complex integration among knowledge, skills and acceptance, as well as other important factors related to the environment and the health care.¹

The adherence to the treatment allows both the increased life quality of HIV carriers and the decreased number of admissions arising from opportunistic infections and, consequently, the reduction of the mortality rate due to AIDS. In this context, the greatest current challenge has been the adherence to the antiretroviral treatment. Accordingly, adherence should be defined as the effective use of the medication as prescribed.²

The strong therapeutic regimens are complex and often demonstrate problems towards the adherence to the treatment. The obstacles to the medication administration vary from a very large number of pills per day until reaching a set of combinations to take from 10 to 20, in divided doses, at accurate schedulings, with dietary changes and toxic effects associated with most drugs.³

Strategies have been developed to assess the therapeutic adherence, including the adoption of laboratory measurements for prescribing drugs dosages in the body, packaging with special devices that regulate the opening hours of the flasks and even the application of questionnaires aimed at determining the referred adherence. The definition of strategies aimed at improving the therapeutic adherence should be performed based on the profile of patients served by the pharmacotherapeutic monitoring service.²

OBJECTIVE

- To characterize the scientific production on the adherence to the antiretroviral treatment in patients with Acquired Immunodeficiency Syndrome.

METHOD

It is quantitative and descriptive study conducted through integrative review. For elaborating this study, we went through the following steps: establishment of the research

question and objective of the integrative review; establishment of criteria for inclusion and exclusion of papers; definition of the information to be extracted from the selected papers; analysis of results; discussion and presentation of results and, finally, the review presentation.

For guiding the research, we have formulated the following question << How is characterized the scientific production in the period from 2008 to 2012? >>.

The inclusion criteria used for the selection of the analyzed papers were: full papers, in Portuguese, English or Spanish, freely available, published in the last five years and with their topics related to the studied matter. Thus, studies with publication year less than 2008 and duplications were excluded. All the previously selected papers were analyzed, in order to check if their study contents matched the proposed theme.

The data survey took place in August 2011, by using data available in the Virtual Health Library (VHL), which is inserted in the Medicine Regional Library (BIREME), specifically in the databases of the Latin American and Caribbean Health Sciences (LILACS), Medical Literature Analysis and Retrieval System Online (MEDLINE), Scientific Electronic Library Online (SCIELO), Medical Publications (PUBMED) and the Nursing Database (BDENF).

The descriptors used for the data collection were “Acquired Immunodeficiency Syndrome”, “antiretroviral” and “Patient’s refusal towards the treatment”, according to the classification of the Medical Subject Headings (MESH).

49 papers were found, of which only 25 met the inclusion criteria. For performing the sample analysis, we made use of an adapted tool⁴, which covered the following aspects: paper title, author names, studied intervention, results and final considerations/conclusions.

In order to only keep valuable studies in this research, the pre-selected papers were assessed as relevant and methodologically appropriate by using a form for assessing studies that has been prepared by the Critical Appraisal Skills Programme (CASP). ⁵ The studies that reached a score of seven, given that the maximum possible was ten points, were included in the sample.

A critical analysis of the included studies was conducted in accordance with the purpose of this research, through which we aimed at characterizing the scientific

production about the adherence to the antiretroviral treatment in patients with Acquired Immunodeficiency Syndrome. The results were presented in forms of figures.

RESULTS AND DISCUSSION

The majority of the found studies were published in 2010, as shown in Figure 1. In this

review, the Brazil is the country that has been highlighted in the publications, followed by the USA, but it was noticeable a significant total of publications in African countries (Ethiopia, Botswana, Uganda, South Africa, Nigeria and Kenya), as shown in Figure 2.

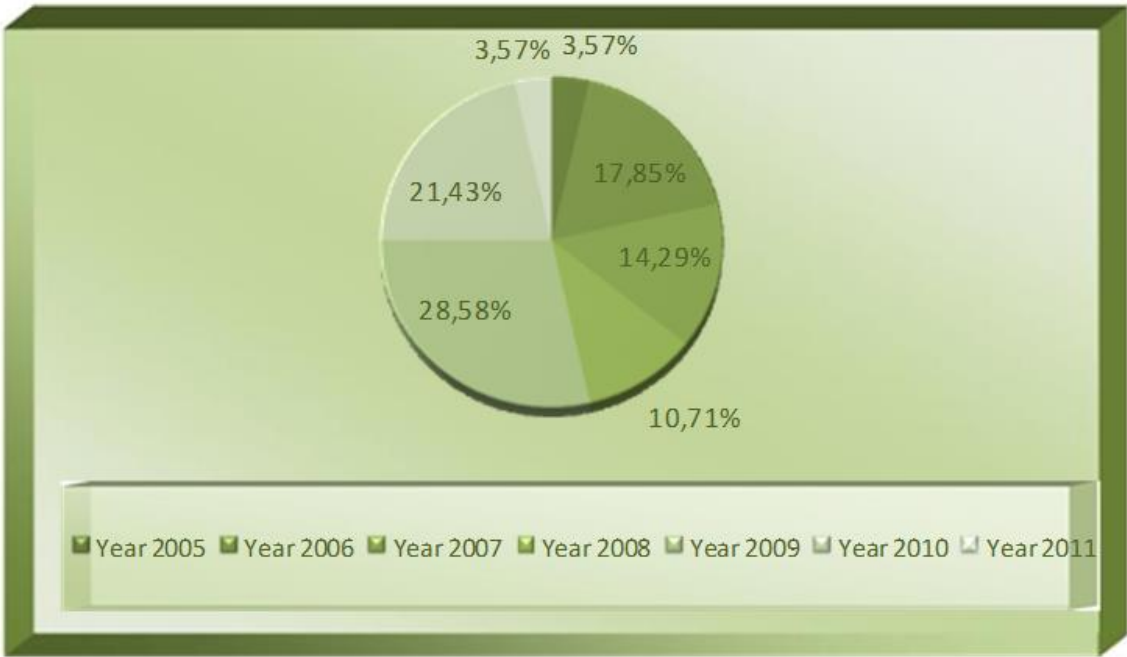


Figure 1. Year publication



Figure 2. Publication countries

The most approached study type was the cross-sectional, as shown in Figure 3.

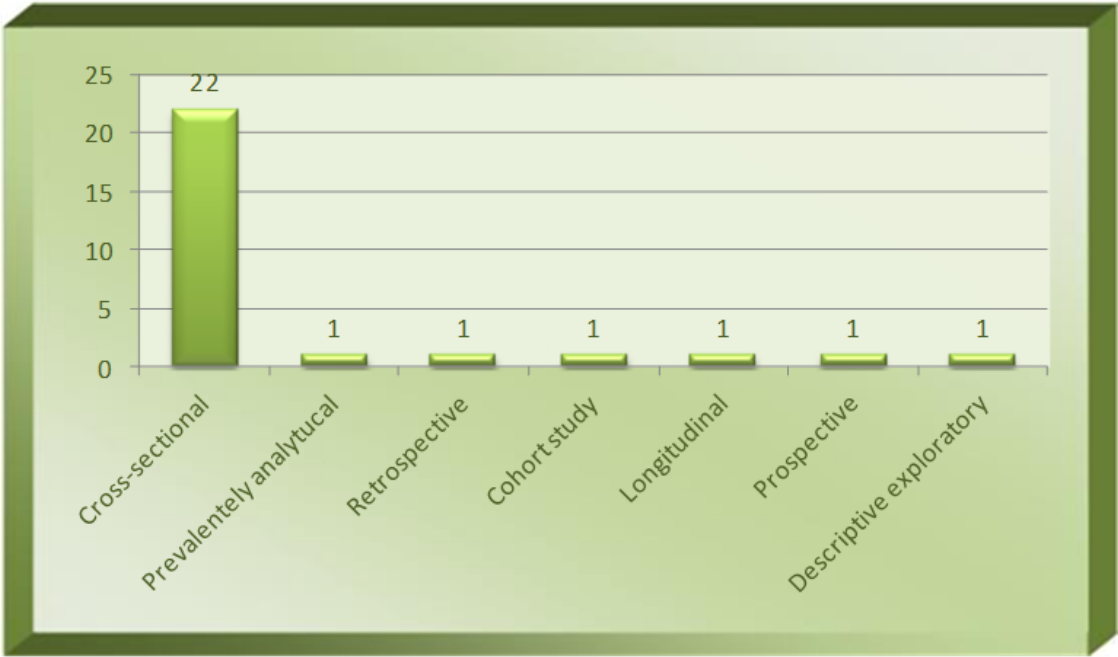


Figure 3. Total of works

Regarding the techniques used to verify the degree of adherence, the following ones were found: self-report by interviews and questionnaires, pharmacy records, analysis of medical charts and medications counting.

In 13 studies, only the self-report was being used as analysis method (interviews and questionnaires), however, the best way to analyze the adherence is to make use of more than one method.

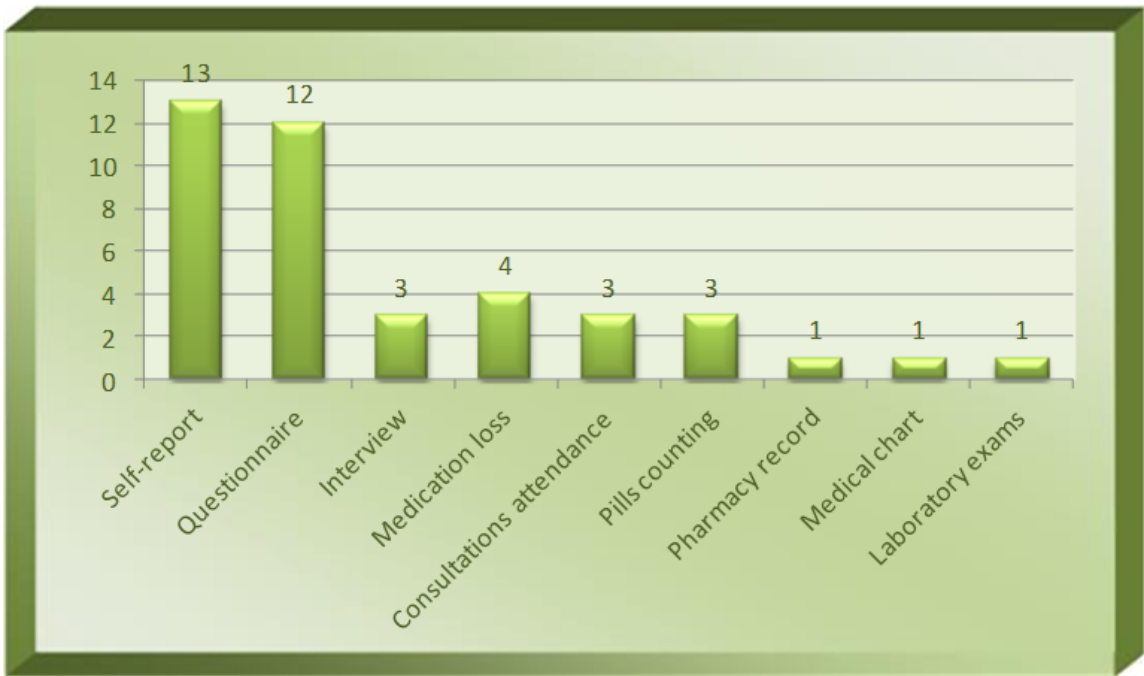


Figure 4. Analysis method

The highest rates of non-adherence were 43,7%⁴ and 57,9%⁵, being that the first one was perceived through pharmacy data and medical data, and the second through withdrawals of medications from the pharmacy. In a similar study, the rate of non-adherence by self-report was 6.9%; regarding the pill counting, the non-adherence was 11.9%.⁶

This observation is valid with respect to the choice of technique to be used, because some authors indicate that there might be distortion or alteration of information through the self-report; and the ideal would be to use more than one technique to ascertain the rate of adherence, such as pharmacy records,

analysis of medical charts and laboratory exams.

In another study of literature review, among the 43 papers analyzed that showed the incidence or prevalence of non-adherence, the average rate was 30,4% of non-adherents - minimum limit of 5,0% and maximum of 67,0%; the rates have varied, mainly, according to the measure type, study design and the cutoff point of the adherence.⁷

In one of the studies, the degree of adherence to the treatment was determined only by the frequency of medications withdrawal, without any application of questionnaire for raising data that could allow knowing the habits of patients

regarding the conduct towards the time of ingestion of drugs and other details about its routine. The justification for the conduct is related to the non-attendance for taking medications during the period determined by the scheduling, given that it is the first step to select individuals who need further information on the importance of all the necessary precautions so that there will not a medication failure, thereby influencing in their adherence.⁸

The methods used for measuring the adherence were grouped into three categories: subjective measures, based on self-report by interview; objective measures, based on pills counting, registration of the pharmacy dispensation and electronic device, placed on the packaging of ARVs; and combination of methods, including interviews, pills counting, pharmacy records, electronic device, reports of health professionals, daily record of the medication intake and medical records.⁷

It should be observed that the same individuals who initially reported correctly taking medications, revealed, soon after, that in everyday practice the things were not like that.⁹ In one of the studies, the rate of adherence was 93,1%, with 15 days of self-report, but the rate dropped to 88,1% when calculated by the method of pill counting without prior warning⁶, i.e., the self-report should not be fully trusted.

Among the factors influencing the non-adherence, the most cited were characteristics of the clinical treatment, due to side effects, presented symptoms, amount of medications, psychological effects, such as from the stigma of the disease, fear of rejection and discrimination, laboratory and sociodemographic factors.¹⁰⁻¹⁵ In one of the studies, taste, size, smell and amount of pills have been highlighted as the main difficulties of patients to comply with the treatment, with a rate of 40% among all patients.¹⁴

The schooling, when associated with levels of income, is an indirect indicator of the socioeconomic status, by indicating that they have less access to information about AIDS and its treatment, thus resulting in an insufficient understanding of the ARVs' role and the potential damages of the non-adherence.¹⁶⁻⁸ HIV-positive people with less schooling might be experiencing the worst living conditions and the presence of other stressors, in addition to those related to the experience of seropositivity, with negative impact on the self-care and the treatment adherence.¹¹

It is important to realize that the association between low adherence and certain social groups need to be cautious, because the stigmatization, discrimination and control processes might disseminate inequalities and devaluation/disqualification of such groups/people.¹⁹⁻²¹

The use of antiretroviral therapy also entails a change of routine and habits, since it will have to be included in the daily life of the person, and it is necessary to define schedules, feeding (restrictions, meals, fasting and interval, in the case of some medications) and frequency of use, which can be difficult for some social groups or individuals.^{12,22}

In one of the studies, it was found the need for greater care by the teams for the presence of living conditions and/or situations experienced by patients (albeit transitory) that might increase the vulnerability to adherence-related disruptions.¹¹

The results raised in this work also suggest that people with a history of previous failures in the use of TARV maybe present a greater probability to break again or join in unsatisfactory levels.¹¹

Another study found a correlation between the adherence and the clinical and/or laboratory parameters: 76,0% of them were associated with virological and/or immunological values. Besides these, other authors assessed the clinical evolution, the plasma concentration of drugs and the increased corpuscular volume of the erythrocyte.²³⁻²⁵

For patients starting the antiretroviral therapy, the most presented variables were: instability of risk variables; increased depression after antiretroviral therapy; lack of family or social support; and use of alcoholic beverages. It should be understood as 'instability of risk variables' the one of patients who relatively kept a high use of tobacco, alcohol and illicit drugs or, even, have increased their consumption after the beginning of the HAART. Before starting the ARV medication, it should be recommended the supportive treatment to users of alcoholic beverages and/or illicit drugs.²⁴

Among the predictive factors of the non-adherence linked to the health services, the most presented were: being a service with up to 100 patients and the lack of regularity in relation to the monitoring consultations.⁷

Another important factor pointed out in this review, which might influence with the adherence to the treatment, was the life

quality, since people with higher life quality are also more likely to adhere to the treatment.¹³

In this context, both the life quality and the adherence to the treatment share the same determinants: they both are associated with the viral load, disease stage and symptoms. The prejudice of the therapeutic adherence is associated with a higher viral load, and this increased viral load is associated with lower levels in the scores of life quality. On the other hand, having an AIDS diagnosis and symptoms associated with this disease are aspects related to a lower life quality and greater adherence to the treatment. Nonetheless, the three studies might indicate that, the lower the interference of chronic diseases on the daily life, whether because the patient is asymptomatic, or because the memory of ingesting the drug is not forced, the higher the life quality.²³⁻⁵

CONCLUSION

From the bibliographic survey conducted in this work, it should be concluded that there is still a great rate of non-adherence to the antiretroviral treatment by patients with AIDS. The techniques and methods used to verify this rate of adherence are crucial to find a result closer to the reality, but without a bias.

It was found that the self-reported was the most used technique to verify adherence, together with the analysis of pharmacy records, which might come to show individual characteristics inserted in the conduct of their treatment, such as: routines, customs, habits and ideas. Thus, it should be realized that the knowledge of these individual factors related to sociodemographic factors and to the treatment might identify patients with a higher risk for the non-adherence, as well as assisting the health care team to provide further clarification to these individuals, with a view to, consequently, increase the amount of adherences.

The health care team should always search for ways to better understand, inform and enlighten the population, especially when it comes to people affected by a disease of global concern. Articulated in multidisciplinary teams, health professionals should keep in mind that, to achieve an effectiveness treatment, one must seek an alliance with the patient, thereby maintaining a relationship of trust and support.

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