NURSING ASSISTANCE AND ADHERENCE TO ANTIRETROVIRAL THERAPY

Assistência de enfermagem e adesão à terapia antirretroviral

Asistencia de enfermería y adherencia a la terapia antiretroviral

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ABSTRACT

Objective: to analyze the classification of adherence and the organization of nursing care in specialized services. **Method:** evaluative and cross-sectional study, with a quantitative approach, carried out in five Specialized HIV Care Services in Pernambuco, Brazil. Participated 358 adults using antiretrovirals and the respective service nurses. Data were collected using two validated instruments and analyzed using statistical tests. **Results:** there was a prevalence of regular and low adherence to antiretrovital therapy. (41.1% and 39.4%, respectively). It was evident that the level of assessment of nursing care was not decisive for the adherence scores. **Conclusion:** the result found in the study is worrying, since the predominant adherence was regular. Developing the systematization of nursing care in specialized services should be encouraged with a view to promoting medication adherence.

DESCRIPTORS: HIV; Medication adherence; Nursing; Anti-retroviral agents; Delivery of health care.

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RESUMO

Objetivo: analisar a classificação da adesão e a organização da assistência de enfermagem em serviços especializados. **Método:** estudo avaliativo e transversal, com abordagem quantitativa, realizado em cinco Serviços de Assistência Especializada em HIV de Pernambuco, Brasil. Participaram 358 adultos em uso de antirretrovirais e os respectivos enfermeiros dos serviços. Os dados foram coletados por meio de dois instrumentos validados e analisados a partir dos testes estatísticos. **Resultados:** houve prevalência de uma regular e baixa adesão à terapia antirretrovital. (41,1% e 39,4%, respectivamente). Evidenciou-se que o nível de avaliação da assistência de enfermagem não foi determinante para o escores da adesão. **Conclusão:** o resultado encontrado no estudo é preocupante, visto aque adesão predominante foi regular. Desenvolver a sistematização da assistência de enfermagem nos serviços especializados deve ser estimulado com vistas à promoção da adesão medicamentosa.

DESCRITORES: HIV; Adesão à medicação; Enfermagem; Antirretroviral; Assistência à saúde.

RESUMEN

Objetivo: analizar la clasificación de adherencia y la organización del cuidado de enfermería en servicios especializados. **Método:** estudio evaluativo y transversal, con un enfoque cuantitativo, realizado en cinco servicios especializados de atención del VIH en Pernambuco, Brasil. Participaron 358 adultos usando antirretrovirales y las respectivas enfermeras de servicio. Los datos fueron recolectados usando dos instrumentos validados y analizados usando pruebas estadísticas. **Resultados:** hubo una prevalencia de adherencia regular y baja al tratamiento antirretrovital. (41,1% y 39,4%, respectivamente). Era evidente que el nivel de evaluación de los cuidados de enfermería no fue decisivo para los puntajes de adherencia. **Conclusión**: el resultado encontrado en el estudio es preocupante, ya que la adherencia predominante fue regular. Se debe fomentar el desarrollo de la sistematización de la atención de enfermería en servicios especializados con el fin de promover la adherencia a la medicación.

DESCRIPTORES: VIH ; Cumplimiento de la medicación; Enfermería; Antirretrovirales; Prestación de atención de salud.

INTRODUCTION

The discovery of acquired immunodeficiency syndrome (AIDS) and its etiological agent, the human immunodeficiency virus (HIV), has become a milestone in the history of world health. Despite the advances in scientific knowledge and therapeutic plans, this addiction still represents a health challenge.[1]

The history of AIDS has changed considerably after the advent of antiretroviral therapy (ART), allowing for control in viral multiplication and slower course of the disease, characterizing it as a chronic infection and generating a reduction in morbidity and mortality. In addition, it was possible to improve the individual health of people living with HIV and reduce transmission in a collective way.[2]

It is important to emphasize that HIV control requires the seropositive person to perform a permanent clinical-laboratorial follow-up with the multiprofessional team of the health service and make continuous and daily use of ART, thus ensuring adequate adherence to treatment. Investing in monitoring adherence to ART becomes crucial to avoid therapeutic failures, becoming a priority of nursing care and health team.[3]

The proposal of a care plan for people living with HIV opens the dimension for a scientific practice of nursing, to this clientele. Therefore, it is essential that nurses improve care, optimizing and prioritizing actions and interventions to adhere to ART by restructuring their practices in order to use specific tools to enhance care.[4]

Inserted in this context, understanding the organization of nursing care can contribute as a tool that strengthens the nurse-patient bond in order to stimulate care in a holistic way, in order to act actively in autonomy and effective participation of people living with HIV in the process of health-disease and in the construction of self-care. In this way, it becomes possible to (re)build knowledge and encourage behavioral changes necessary to care for the disease, resulting in successful HIV treatment.[5–6]

In this context, offering better assistance to the patient regarding HIV treatment is essential to increase the effectiveness of HIV treatment. Considering its importance, it is understood that the organization of care assistance can be a crucial factor for adherence. In view of the above, the present study aims to analyze the classification of the adhesion and the organization of nursing assistance in specialized services.

METHOD

The study is evaluative, quantitative, observational and transversal. It was conducted in Serviços de Assistência Especializada em HIV (SAE) inserted in the 1st Gerência Regional de Saúde (GERES) of Pernambuco. Currently, the state is subdivided into 12 GERES.

Regarding the number of SAEs, there are 17 SAEs in the I GERES, of which five were chosen, from a random selection, to compose the study sample in order to perform a regional representation of approximately 30% of the I Regional Health. Therefore, the survey was conducted in the municipalities of Recife, Olinda, Igarassu, Camaragibe and Vitória de Santo Antão.

The study population size was estimated based on an average of 5,414 patients enrolled in the sistema de controle logístico de medicamentos (SICLOM) in the selected services. Therefore, to

calculate the sample we used the sample equation for nominal variable in finite population, ensuring proportionality between sites and totaling 358 individuals.

People living with HIV aged 18 years or older and in use of ART for at least six months (mean time to achieve virologic suppression) were included in the survey. Those users with intellectual or multiple disabilities that made it impossible to understand the research were excluded.

To answer questions related to the organization of nursing care, a coordinator or supervisor was invited who was responsible for the duties developed by the nursing of each service with a period equal or greater than three months. For services with more than one nurse, it was chosen to invite the one with attributions of coordinator. Already in services where the activities of coordination were not carried through for the nursing, the nurse was invited as suggestion of the coordinator. It was excluded the coordinator of nursing that carried through attributions only in the Center of Test and Reception. Finally, five nurses participated in the study.

The independent variables were described by socio-demographic, behavioral health data and clinical aspects. The dependent variable was described by the adhesion from the application of the validated version for the Portuguese language of the "Cuestionario para la Evaluación de la Adhesión al Tratamiento Antiretroviral" – CEAT-VIH. It is a tool composed of 20 questions that address the main factors that may interfere with adherence to ART in adults. The CEAT-VIH's minimum score is 17 and the maximum 89 points. Thus, adherence receives three classifications: good adherence (≥ 79 score), which is equivalent to ≥ 85%; regular adherence, (between 53 and 78), which represents 50% to 84% adherence; and low adherence (< 53), which means less than 50% adherence to ART.[7]

In order to assess the quality of nursing care, a cutout of the Qualiaids questionnaire was performed and applied to the nurses of each service under study. It is composed by 107 questions, four of which are destined to assistance evaluation. Another question was added in order to verify the availability of minimum team professionals, totaling five questions. The scores receive values from zero to two, where two refer to the best expected quality, corresponding to the expected standard, one to the acceptable standard and zero to the insufficient standard. The instrument has the objective of offering support to local management and defining policies that encourage the quality of service, in addition to subsidizing an evaluation for the technical activities developed by nursing at the time of care work.[8]

The data collection took place between April 2018 and September 2018. Then, the data were double typed and organized in EPI INFO electronic spreadsheet, version 3.5.2, in order to compare and correct the divergent values, which were later exported to the Statistical Package for the Social Sciences® (SPSS), version 18.0, for statistical analysis.

To evaluate the socio-demographic, behavioral, clinical health profile and the adherence to ART of the interviewees, the percentage frequencies were calculated. To compare the association between the nursing care quality score and the CEAT-VIH adherence score the Spearman correlation test was applied. The significance level of 5% was considered.

The study was extracted from the Master's thesis entitled "Adherence and expectation of self-efficacy to antiretroviral therapy in people living with HIV" from the University of Pernambuco, 2018.

The study had prior approval from the Research Ethics Committee of the Hospital Complex of the Universidade de Pernambuco (UPE) on March 15, 2018, through Opinion No.2,545,008, meeting the ethical requirements proposed by Resolution 466/12 and 510/16 of the National Health Council.

RESULTS

Table 1 shows the socio-demographic data of people living with HIV. Mean age was 44 years, standard deviation of ± 11.5, and age extremes ranging from 18 to 85 years.

In Table 2, information regarding behavioral and clinical health data is verified. The mean diagnosis and treatment time were 8.67 and 7.97, respectively. Regarding not using the condom regularly in sexual relations, the reason for not liking it was most cited by 329 (92%), followed by forgetfulness and confidence (17 -4.8%- and 11 -3.2%-, repectively).

It is also observed that most patients had 345 (96.5%) as the most prevalent form of sexual transmission, followed by puncture-cutter accidents and blood transfusion three (0.9%) each. Of those who reported using any type of licit/illegal drug, alcohol, cigarette and marijuana were the most cited 214 (59.8%), 106 (29.6%) and 28 (7.8%), repectively.

Table 3 presents the descriptive statistics of the scores that evaluate the CEAT-VIH classification. The extremes of the scores varied from 46 to 86 points, with a mean of 74.8 points and standard deviation of ± 5.8. The proportion comparison test was significant (p-value < 0.001), indicating that the regular and low adhesion percentages are significantly higher in the evaluated group.

In Table 4 it is verified that the municipalities that present SAEs and the evaluation of nursing assistance. The median score of CEAT-VIH adherence was higher in the group of Vitória and Olinda (both with a median of 78 points). The Spearman correlation coefficient was not significant between the nursing care score and the median of ART adherence by CEAT-VIH (p--value = 0.361), indicating that the nursing care evaluation level was not determinant for the CEAT-VIH scores.

It should be noted that in no service studied, the Systematization of Nursing Care was developed from a systematic development.

Table 1 – People living with HIV, according to sociodemographic characteristics. Recife, PE, Brazil, 2018

Evaluated Factor	N	%
Sex		
Female	136	38,0
Male	222	62,0
Age group		
18 to 28	42	11,7
29 to 39	82	22,9
40 to 60	215	60,1
Greater than 60	19	5,3
Schooling		
Non-literate	10	2,8
1st grade (in)complete	144	40,2
2nd grade (in)complete	146	40,8
Higher Education (in)complete	58	16,2
Monthly family income		
Up to a minimum wage*	183	51,1
> 1 a 2	108	30,2
> 2 a 3	38	10,6
> 3 a 4	14	3,9
> 4	15	4,2
Contributes to the support of the family member		
Yes, totally	158	44,1
Yes, partially	118	33,0
Does not contribute	82	22,9
Receives social benefit		
Yes	141	39,4
No	217	60,6
Which benefit		
Sickness benefit (INSS)	86	24,0
Bolsa família	29	8,1
Allowance	26	7,3
Works		
Yes	143	39,9
No	215	60,1

[1]p-square test value for proportion comparison (if p-value < 0.05 the proportions differ significantly).
* Minimum wage value at the time of the study: 954.00.
Source: Study data.

Table 2 – People living with HIV, according to behavioral characteristics and health clinics. Recife, PE, Brazil, 2018

Evaluated Factor	N	%	p-value[1]
Performs physical activity			
Yes	129	36,0	<0,001
No	229	64,0	
Diagnostic time			
Less than 1 year	35	9,8	
1 to 5 years	96	26,8	<0,001
More than 5 to 10 years	96	26,8	
More than 10 years	131	36,6	
Minimum – Maximum	0,50 – 33,00		-
Time of HIV treatment			
Less than 1 year	41	11,5	
1 to 5 years	114	31,8	
More than 5 to 10 years	85	23,7	<0,001
More than 10 years	118	33,0	
Minimum – Maximum	0,50 – 25,00		-
Companion has HIV			
Yes	92	25,7	
No	123	34,4	
No partner	128	35,8	<0,001
Doesn't know	15	4,2	
Use a condom			
Yes	241	67,3	
No	35	9,8	
Sometimes	29	8,1	<0,001
No sexual intercourse	53	14,8	
Know how you got HIV			
Yes	228	63,7	<0,001
No	130	36,3	
Use of drugs			
Yes	129	36,0	<0,001
No	229	64,0	
Clinical situation			
Symptomatic	20	5,6	<0,001
Asymptomatic	338	94,4	
Opportunistic infections			
Yes	125	34,9	<0,001
No	233	65,1	
Irregular adherence to ART			
Yes	86	24,0	<0,001
No	272	76,0	

[1]p-square test value for proportion comparison (if p-value < 0.05 the proportions differ significantly).

Table 3 – People living with HIV in antiretroviral treatment, according to adherence to ART, according to CEAT-VIH scores. Recife, PE, Brazil, 2018

Evaluated Factor	N	%	p-value[1]
Good adhesion	70	19,6	
Regular membership	147	41,1	<0,001
Low adherence	141	39,4	

[1]p-square test value for proportion comparison (if p-value < 0.05 the proportions differ significantly).

Table 4 – Classification of ART adherence according to CEAT-VIH median by QUALIAIDS Nursing assistance scores. Recife, PE, Brazil, 2018

Place	Nursing care score	Median of CEAT-VIH	Correlation (p-value[1])
Olinda	5	78,00	
Igarassu	8	77,00	
Vitória de Santo Antão	10	78,00	ρ = 0,527 (0,361)
Camaragibe	7	77,00	
Recife	4	76,00	

ρ = Spearman correlation coefficient.
[1]p-value of the Spearman test.

DISCUSSION

The sociodemographic variables obtained in the results show that, although the majority of the participants were male, the proportion of men to each woman is less than two to one. It is also worth mentioning the greater representation in older adults, low schooling and financial vulnerability expressed by low income and high prevalence of unemployed, corroborating the current epidemiological trend of the disease in the country, pointed out in national and international literature.[9–11]

This scenario is worrying considering that negative social aspects contribute to a worsening of the epidemic scenario, since it affects part of the population that presents unfavorable conditions to face the disease.[12]

Concerning clinical and behavioral health data, the data found corroborate findings from other published studies. In this sense, the affective sexual partnership seroconcordant raises concerns about the possibility of exchanging the viral load during unprotected sexual intercourse, for this reason, the maintenance of the undetectable viral load is an important marker for reducing the chances of virus transmission, even in seroconcordant cases.[9,13–14]

In this context, it is urgent to say that this study has shown that a significant number of people living with HIV do not use the condom on a regular basis. It is known that consistent condom use is an important preventive measure not only among serodiscordant couples, but also in seroconcordants, because it aims to avoid reinfection of strains already resistant to ART, decrease viral load during sexual intercourse, and avoid transmission of other sexually transmitted infections (STIs).[15]

In view of the positive diagnosis for HIV infection, a greater investment in health actions is necessary. Treating HIV as a chronic infectious disease is the key to improving the onset of ART and long-term compliance. Public health strategies need to expand and strengthen health services and provide longitudinal patient support.[16]

Understanding the factors that may compromise ART adherence in people living with HIV becomes critical, since it is worrying that after years of more positive indicators, the response to AIDS in Brazil again shows signs of re-emergence, especially when technical-scientific knowledge points to more effective control of the epidemic in the world.[17]

Despite advances in HIV treatment in more than three decades of epidemics, there is evidence of high prevalence for irregular/low adherence identified in the literature.[18]

From this perspective, nursing care creates spaces that go beyond clinical limits, by promoting opportunities for expanded dialogues that facilitate the interaction of the triad among patients, professionals and service, and allow for the emergence of issues hitherto unknown, favoring the creation of bonds of trust.[19]

In relation to nurses' practices, although this study evidences that the level of nursing care evaluation was not determinant for the adherence scores, it is known that the nurse plays a fundamental role in caring for people living with HIV. This professional offers orientations, practices of care planning, execute the systematization of nursing assistance and develop individual and group activities, besides stimulating the daily taking of ART.[20]

The practice of the professional of nursing, must be systematized, mainly because it is an essential element of the health team and primordial in the care to the people living with HIV. Sistematização da Assistência de Enfermagem (SAE) should promote a universal, equitable and integral assistance to these individuals, based on the humanization of care, in a holistic and welcoming way. Thus, it is known that the health care system needs to be developed and executed based on planned steps for people living with HIV to be benefited in order to collaborate for a greater adherence to treatment and consequent increase in life expectancy and quality.[21]

There are still challenges in the sphere of prevention, especially with regard to the organization of services and the attention given by nursing professionals to users. There is an urgent need for research, not only in clinics, but also to evaluate the quality of care provided in order to guarantee changes in the ideological-assistance scenario, and that the results may collaborate in the continuous improvement of care to those living with HIV in Brazil.[22]

It is important to emphasize that the nursing team involved in the treatment of people living with HIV must keep in mind that the interventions carried out to improve the quality of life of this population must be continuous and complex in order to favor the participation of the patient under his/her health and how much he/she is responsible for the success of the treatment.[23]

Finally, it is understood that adherence to ART must be permanently evaluated by the health team. There is also the need

for new studies on the subject that point out new strategies/interventions that favor adherence to ART.[23]

CONCLUSION

The study showed that people with HIV regularly adhere to antiretroviral drug therapy. This result is worrying, since low levels of income and schooling were found in the investigated population, which are classified as risk factors for low adherence.

In clinical practice and nursing research, adherence to ART has been highlighted in the planning and evaluation of educational interventions for care. In this sense, it reinforces the importance of the implantation of a Systematization of Nursing Assistance in the services of reference for HIV, what had not been identified in the study. Such finding can justify the non association of the adhesion with the nursing assistance.

Therefore, it reiterates the importance of studies that make available culturally adapted and valid instruments, to evaluate the adherence to ART and thus contribute to the advance of knowledge in health care for people living with HIV. Thus, nursing should perform the diagnosis of situations in which people living with HIV think themselves less able to fulfill the prescription, helping them to develop coping mechanisms.

As limitations, it is observed that the study was carried out only in municipalities of a single Health Regional of a state in the country, and also, because it is a cross-sectional study, it is not possible to safely conclude about causal relationships, considering that these studies explore, simultaneously, the exposure and the subject's health condition.

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