

# Coping and adaptation and their relationship to the spiritual perspective in patients with HIV/AIDS

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## Coping and adaptation and their relationship to the spiritual perspective in patients with HIV/AIDS

### Abstract

**Objective.** To identify the coping and adaptation process and its relationship to the spiritual perspective in patients with HIV/AIDS. **Methodology.** Cross-sectional descriptive study in which 100 patients participated and who were applied instruments like *Roy's coping and adaptation measurement scale* and *Reed's Spiritual Perspective Scale*. The study was conducted in 2009, at a state healthcare institution in Bogotá (Colombia). **Results.** Five patient subgroups were identified (Recursive and Centered, Physical and Focused, in warning process, in systematic processing, and knowing and relating) who presented different dynamics regarding the greater or lesser use of coping strategies. In most patients a high spiritual perspective was identified upon the experience of the disease. A weak, but significant correlation was found between the coping and adaptation processes and the components of the spiritual perspective. **Conclusion.** A relationship exists between the spiritual perspective and the coping and adaptation process to the HIV/AIDS disease; the aforementioned must be considered in the therapeutic relationship as a relevant component of caretaking.

**Key words:** spirituality; psychological adaptation; HIV.

## Afrontamiento y adaptación y su relación con la perspectiva espiritual en el paciente con VIH/SIDA

### Resumen

**Objetivo.** Identificar el proceso de afrontamiento y adaptación y su relación con la perspectiva espiritual en el paciente con VIH/SIDA. **Metodología.** Estudio descriptivo transversal en el que participaron 100 pacientes a quienes se les aplicaron los instrumentos *Escala de Medición del Proceso de Afrontamiento y Adaptación* de Roy, y la *Escala de Perspectiva Espiritual* de Reed. El estudio se realizó en 2009, en una institución estatal de salud en Bogotá (Colombia). **Resultados.** Se identificaron cinco

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subgrupos de pacientes (recursivo y centrado, físico y enfocado, en proceso de alerta, en procesamiento sistemático y conociendo y relacionando) quienes presentaron diferentes dinámicas en cuanto al mayor o menor uso de las estrategias de afrontamiento. En la mayoría de pacientes se identificó una alta perspectiva espiritual ante la vivencia de la enfermedad. Una débil pero significativa correlación se encontró entre los procesos de afrontamiento y adaptación y los componentes de la perspectiva espiritual. **Conclusión.** Existe relación entre la perspectiva espiritual y el proceso de afrontamiento y adaptación a la enfermedad del VIH/SIDA. Lo anterior debe ser tenido en cuenta en la relación terapéutica como componente relevante del cuidado.

**Palabras clave:** espiritualidad; adaptación psicológica; VIH.

## Afrontamento e adaptação e sua relação com a perspectiva espiritual no paciente com HIV/AIDS

### ■ Resumo ■

**Objetivo.** Identificar o processo de afrontamento e adaptação e sua relação com a perspectiva espiritual no paciente com HIV/AIDS. **Metodologia.** Estudo descritivo transversal no que participaram 100 pacientes a quem se lhes aplicaram os instrumentos Escala de Medição do Processo de Afrontamento e Adaptação de Roy, e a Escala de Perspectiva Espiritual de Reed. O estudo se realizou em 2009, numa instituição estatal de saúde em Bogotá (Colômbia). **Resultados.** Identificaram-se cinco subgrupos de pacientes (recursivo e centrado, físico e enfocado, em processo de alerta, em processamento sistemático e conhecendo e relacionando) quem apresentaram diferentes dinâmicas quanto ao maior ou menor uso das estratégias de afrontamento. Na maioria de pacientes se identificou uma alta perspectiva espiritual ante a vivência da doença. Uma débil, mas significativa correlação se encontrou entre os processos de afrontamento e adaptação e os componentes da perspectiva espiritual. **Conclusão.** Existe relação entre a perspectiva espiritual e o processo de afrontamento e adaptação à doença do HIV/AIDS, o anterior deve ser tido em conta na relação terapêutica, como componente relevante do cuidado.

**Palavras chave:** spirituality; adaptação psicológica; HIV.

## Introduction

Human beings have the potential to develop their life projects, which can be affected by the experience of chronic diseases, where spirituality and the coping and adaptation process emerge as human expressions in search of balance or of improving quality-of-life conditions. Situations of chronic disease like HIV/AIDS affect the individual's integrity, influencing on his/her physiological processes, as well as on psychosocial aspects represented on the performance of their roles, in their interaction with the environment and on the concept of self.<sup>1,2</sup> Thus, the individual endures uncertainty, vulnerability, fragility, anxiety, fear,

suffering, and pain, and wonders about a past, present, and future.<sup>2</sup> The figures of this disease throughout the world show the great impact it has on the lives of patients and of their families: the number of people living with HIV/AIDS has gone from 8-million in 1990 to over 33-million cases in 2009, and it is on the rise.<sup>3</sup>

Roy's Adaptation Model<sup>4</sup> suggests that individuals are holistic adaptive systems in constant interaction in a changing environment. The term *coping*<sup>4</sup> refers to the behavioral and cognitive efforts made by the individual to meet the environmental demand acting as

a whole to maintain his/her vital processes and integrity. Through the development of the information cognitive process, people assign meanings to situations framed within their experience and knowledge, and based on them, elaborate responses that permit their facing the circumstances.

Reed<sup>5</sup> defines the *spiritual perspective* as the personal vision to find meaning in life through a sense of interrelation with something greater than the very being, which transcends the self and enhances it in a way that empowers individuals without devaluating them. This interrelation can be intrapersonal (with oneself), interpersonal (with the world: others and nature), or transpersonal (with a transcendent being: God, or a greater power than the individual's common origin). Transcendence is present in these interrelations, seen as a faculty of the individual. Additionally, it alludes to the spiritual perspective as a behavioral and personal view (beliefs) that expresses a sense of transcendental relationship with someone superior, being a particularly important experience during the adult stage that is intensified with the nearness of death.

Spirituality can be identified by the nursing professional as a resource of great value for caregiving, given that it can be conceptualized as a component of the therapeutic relationship in favor of human health and well-being. Reed<sup>6</sup> suggests that spirituality is part of the ontological basis of nursing, por ser una basic characteristic of humanity. Thus, the spiritual perspective and the coping and adaptation process can be considered integrally, as human expressions that intervene upon the experience of any disease, among them HIV/AIDS.

Now, most scientific literature related to nursing caregiving of these types of patients centers on interventions of physiological aspects, leaving aside the human being's integrality. This situation has repercussions on the very conceptualization of caregiving, given that it does not consider the person to be cared for as a holistic being, not considering his/her cognitive, spiritual, and social essence in the search for well-being. This study sought to identify the coping and adaptation

process and its relationship to the spiritual perspective in patients with HIV/AIDS.

## Methodology

This was a cross-sectional descriptive study. A non-probabilistic sample was taken of 100 patients with at least six months of having been diagnosed with HIV/AIDS, who were not in the terminal phase, hospitalized, or in outpatient care in a public sector healthcare institution in the city of Bogotá (Colombia) between November 2008 and January 2009.

To gather the information, the following instruments were used: *Roy's coping and adaptation measurement scale*<sup>4</sup> in its Spanish version (EsCAPS) and the *Spiritual Perspective Scale* (SPS) by Pamela Reed<sup>6</sup>.

The Spanish version of the EsCAPS<sup>7</sup> comprises 47 items, with four Likert-type response options, (4 = always, 3 = sometimes, 2 = rarely, and 1 = never). The scale permits identifying the coping and adaptation strategies the person uses to face difficult or critical situations. Through factor analysis, Roy<sup>4</sup> defined five subscales or factors corresponding to strategies interpreted by the middle range theory of the coping and adaptation process.

The first factor, *Recursive and Centered*, reflects behaviors that use own and external resources centered on expanding the information input phase, to be creative and seek results. The second, *Physical and Focused*, highlights the physical reactions and the information input phase to manage situations. The behaviors of the physical and personal self focused on the three phases of information processing (input, central processing, and output) are considered in the third factor denominated *warning process*. The personal and physical strategies used in the methodical management of situations make up the fourth factor known as *systematic processing*. The fifth factor, *knowing and relating*, describes own and other's strategies to manage situations by using memory and imagination<sup>4</sup>.

Regarding the EsCAPS psychometric capacity, the instrument has a good face or apparent value and a high test-retest correlation (0.90 for factor 1, 0.94 for factor 2, 0.91 for factor 3, 0.92 for factor 4, 0.92 for factor 5). The instrument's reliability, measured via Cronbach's alpha, was also high at 0.88.<sup>7</sup> This scale has been validated in Spanish in groups of patients residing in Panama and Mexico.<sup>8</sup>

This study agreed to use the average by factor and total of the scale, to keep differences in the quantities of items from generating comparative difficulties. The second scale used was the SPS Reed,<sup>5</sup> which comprises 10 items, with Likert-type response options going from 1 (less spiritual perspective) to 6 (greater spiritual perspective). The first four items refer to the person's behaviors and the last six to the spiritual beliefs. The total score corresponds to the sum of the scores of the ten items. The original scale has an internal consistency through a Cronbach's alpha of 0.91.<sup>6</sup>

In Colombia, a study was conducted with abused women, showing an internal consistency of 0.8.<sup>9</sup> This research was approved by the Ethics Committee at Universidad de La Sabana. The ethical aspects considered were the informed signed consent and the confidentiality of the information furnished by the patients. The two instruments were used under authorization from the authors.

For the statistical analysis, Wilcoxon, Kruskal-Wallis, and Spearman non-parametric tests were used. To obtain information on the individual emphasis on aspects of the coping and adaptation process, the positions of the scores of the five EsCAPS factors were taken for each patient. With these, a cluster analysis was applied as an exploratory method to organize homogeneous groups with more than six patients from their profiles of relative responses. The resulting groups were subjected to analysis by the researchers to generate caregiving guidelines as a function of the characteristics identified.

As a response pattern, it was considered to transform the raw scores from the five factors of the EsCAPS scale into evaluative scores of the relative

importance given to each factor in relation to the rest. This score consisted of assigning the range of the raw score for a specific factor like the amount of factors receiving from the patient a score below or equal to that of said factor. In case of equal scores, the middle ranges were considered. The items from the instrument organized into five factors were used as the cluster variables. With the relative score information was obtained on the importance each patient attributed to each factor with respect to the rest. The aforementioned permitted clearly establishing the personal emphasis for aspects evaluated of the coping and adaptation process. This managed to reduce, in part, the problems related to the results of the analysis of the internal consistency of the factors, given that the strict numerical score was not kept in mind but its relative value with respect to the other factors from the instrument.

## Results

The study group was made up of 100 patients, 14 women and 86 men, with mean ages of  $31 \pm 9.1$  and  $38 \pm 9.3$  years, respectively. A total of 92 patients were being cared as outpatients and eight were hospitalized. The average time elapsed after the diagnosis was of  $56 \pm 48.8$  months until the moment of the interview. Of the total number of patients, 93 were in socioeconomic level 3 and less. Schooling conditions were of primary education for 17 of them, secondary for 64, university for 15, and graduate education for four. Of the participants, 62 were employed and 38 were unemployed. The most usual form of cohabitation for the patients was of atypical families (46), followed by nuclear families (28), modified nuclear (15), and extended (11). The religious affiliation was predominantly Catholic (66) or Christian (22); two were Evangelists and one Buddhist; four manifested believing in the existence of a supreme being, although they had no particular religion, and five did not profess any religion.

**Coping and adaptation process.** Table 1 contains the medians, averages, and standard deviations of the coping and adaptation factors. Three of the

five factors have averages and medians above 3.4 and the total of the scale at 3.2, which would indicate a frequency above “sometimes”.

With the socio-demographic variables significant associations were only found among some of the coping and adaptation factors with gender and schooling, thus:

The medians of the EsCAPS total were 3.3 for women and 3.2 for men, without this difference being significant (Wilcoxon  $W = 710$ ,  $p = 0.28$ ). When comparing the average score per gender of factors 1, 2, 3, and 5, only in factor 4 - *systematic processing*, the women presented an average score above that of the men (3.8 and 3.5, respectively), which was statistically significant ( $W = 836$ ,  $p = 0.02$ ).

The Kruskal Wallis test for the education groups reveals as the only significant differences those corresponding to the *Physical and Focused* factor,

with medians obtained in the primary, secondary, university, and graduate levels of 2.5, 2.7, 3.0, and 3.4, respectively (Kruskal-Wallis  $K = 13.8$ ,  $p < 0.01$ ). When Spearman’s correlation coefficients were calculated among schooling variables and each of the factors of the coping and adaptation process and for the scale total, significant correlations were only noted in the *Physical and Focused* factor ( $Rho = 0.36$ ,  $p < 0.001$ ) and for the total scale ( $Rho = 0.22$ ,  $p = 0.03$ ).

**Groups of characteristic profiles.** Five groups were identified, denoted in Table 2 as profiles 3, 4, 6, 7, and 8. As a general pattern, the low relative score is identified, which is found in the *Physical and Focused* factor in most of the groups. The *warning process* is the following factor with lower scores, while for the *Recursive and Centered*, *systematic processing*, and *knowing and relating* there are higher average evaluations.

**Table 1.** Medians, averages, and standard deviations of the EsCAPS scale factors in patients with HIV/AIDS

Factor	Median	Average	Standard deviation
1 Recursive and centered	3.6	3.5	0.4
2 Physical and focused	2.8	2.7	0.5
3 Warning process	3.0	3.0	0.4
4 Systematic processing	3.5	3.4	0.6
5 Knowing and relating	3.5	3.5	0.4
Total scale	3.2	3.2	0.4

**Table 2.** Average values per factor of the profiles for patients with HIV/AIDS

Profile		Factor				
		Recursive and centered	Physical and focused	Warning process	Systematic processing	Knowing and relating
3	(n = 9)	3.2	2.5	3.4	3.5	3.1
4	(n = 22)	3.7	2.5	3.1	3.8	3.5
6	(n = 23)	3.4	2.9	3.0	3.8	3.8
7	(n = 6)	3.4	2.7	2.7	2.4	3.4
8	(n = 20)	3.5	2.4	2.8	3.2	3.6
Total	(n = 80)	3.5	2.7	3.0	3.4	3.5

Group 3 is characterized by the highest evaluation of *warning process* and *systematic processing* and by the low score of *Physical and Focused* against the other factors as the most outstanding contrast of its profile. In group 4, the contrast of *Physical and Focused* is attenuated with the *warning process*, but it is accented with the remaining factors, especially with *Recursive and Centered* and *systematic processing*, which are the most highly evaluated by these patients. The profile of group 6 presents the highest averages in *systematic processing* and *knowing and relating*, contrasting with *Physical and Focused* and *warning process*, although the profile is slightly more balanced than in the other groups.

Group 7 is the only one where three factors are found below 3.0 (*Physical and Focused*, *warning process*, and *systematic processing*). The highest contrast of scores appears between the *Recursive*

and *Centered* and *knowing and relating* factors, as those with the highest averages, and *systematic processing* as the one with the lowest average for these patients. Patients from group 8 assigned higher average scores to the *Recursive and Centered* and *knowing and relating* factors in contrast to a low score for *Physical and Focused*. Lastly, it is clarified that 20 patients presented profiles that could not be classified into groups of acceptable size.

**Spiritual perspective.** Table 3 summarizes the classical descriptive measurements for the components from the SPS scale. The medians show that at least half the patients obtained scores above or equal to 5.2 and the averages were close to 5.0; considering that the maximum value possible in the spiritual perspective is of 6.0, we could speak of a high perspective.

**Table 3.** Averages, medians, and standard deviations of the SPS factors

Factor	Median	Average	Standard deviation
Spiritual perspective	5.2	5.0	0.8
Behaviors	5.3	4.8	1.2
Beliefs	5.2	5.1	0.9

The SPS median in women (5.3) was above that of men (5.1) in the spiritual perspective; additionally, the difference was statistically significant ( $W = 810$ ,  $p = 0.04$ ). In the behaviors, the median for women was 5.4 and that of men was 5.0 and their difference was not significant ( $W = 786.5$ ,  $p = 0.07$ ). Differences in spiritual beliefs were even lower: women had a median of 5.3 and men of 5.2 ( $W = 37.5$ ,  $p = 0.18$ ).

**Relationship between the spiritual perspective and the coping and adaptation process.** Table 4 shows that all the Spearman's correlation coefficients between the components of the two tests are positive, indicating that, in general terms, the coping and adaptation process and the spiritual perspective are directly related. Thus, it is shown by the significant correlation among the total scores of the instruments and, particularly,

the total score of the *EsCAPS* with the *spiritual behaviors*.

In turn, the total score of the SPS scale presents significant correlations with the Ia *EsCAPS Recursive and Centered* and *systematic processing* factors and these with the *beliefs* from the SPS. The *Physical and Focused* factor was only significantly correlated with the *behaviors* component, but not with the total of *spiritual perspective*.

None of the coefficients among the factors from the *EsCAPS* of *warning process* and *knowing and relating* with the *spiritual perspective* from the SPS was significant. Seven of the 18 correlations presented in Table 4 are significant, but only two of them are slightly above 0.28, indicating weak correlations.

**Table 4.** Spearman's correlation coefficients between the factors of the EsCAPS scale and the SPS

EsCAPS factors	SPS factors					
	Spiritual perspective		Behaviors		Beliefs	
	Rho	p	Rho	P	Rho	P
Recursive and Centered	0.28	<0.01	0.17	0.09	0.21	0.04
Physical and Focused	0.15	0.15	0.22	0.03	0.07	0.51
Warning process	0.13	0.21	0.09	0.37	0.12	0.22
Systematic processing	0.24	0.08	0.07	0.47	0.30	<0.01
Knowing and relating	0.18	0.08	0.07	0.48	0.17	0.09
Coping y adaptation	0.25	0.01	0.21	0.04	0.19	0.06

## Discussion

The coping and adaptation process presented by the patients in the study upon the HIV/AIDS experience is evidenced through the use of the coping strategies posed by Roy, represented in the behavioral and cognitive efforts made by the individuals to meet the demands of the environment, which act as a whole to maintain their vital processes and their integrity.<sup>4</sup>

Each of the five groups of patients identified in the study presents its own dynamics regarding a greater and lesser stability in using these strategies represented through the factors or subscales that are part of the EsCAPS (*Factor 1: Recursive and Centered; Factor 2: Physical and Focused; Factor 3: Warning process; Factor 4: Systematic processing; Factor 5: Knowing and relating*).<sup>4,10</sup>

These strategies are the result of the person's management process of the situation, by using the three phases of the information cognitive process: input – central processing - output, which is manifested through the generation of thoughts, feelings, and actions to accomplish coping with the situation, agreeing with the study by González<sup>8</sup> conducted with patients suffering from coronary heart disease.

The socio-demographic variable referring to a high educational level is associated to greater stability in the use of coping strategies. This increasing tendency makes higher educational levels to be

seen as associated to greater protection of the patients against interferences that generate crisis in their activities and everyday worries; as suggested by Roy,<sup>4</sup> individuals use their knowledge and prior experiences to process information to manage coping to adapt upon the situation. Hence, greater education is associated to higher levels of protection of the patients against interferences that generate crisis in their activities and everyday worries.

In the study, the spiritual perspective plays an important role regarding the HIV/AIDS experience; patients allude to it as an important aspect highly present and deeply rooted in their behaviors and in their beliefs. Some studies<sup>11,12</sup> coincide with this appreciation by patients with HIV/AIDS. Also, the spiritual perspective of patients represented by their spiritual beliefs is supported by that posed by Emblen<sup>13</sup> when considering that these emerge from within, may emerge from their intellect and are influenced by their conduct, serve as a guide to aspects of daily living, become sources of support and inner strength that promote the individual toward an optimal level of well-being.

Patients consider spiritual issues as quite important and influencing in their lives and frequently evoke them in their conversations with friends, during moments they share with others, and in their readings, besides having a regular habit of prayer or meditation. Additionally, within the patients'

spiritual perspective, forgiveness is manifested as a spiritual belief and it is supported by that posed by Reed inasmuch as it is an important aspect to highlight related to spirituality, both in the religious and non-religious sense, upon promoting the sense of connection with oneself, with other people, and with a God or a superior power. It bears a therapeutic value represented in facilitating the connection through the dissolution of excessive guilt felt within oneself, expectations of criticism from others, of criticism from others and the solution of hostility toward the rest.<sup>6</sup>

As part of the patients' spiritual perspective, the socio-demographic variable, religious affiliation, are shown as a spiritual behavior where Catholicism and Christianity translate into aspects that motivate sharing spiritual aspects with others where reference is also made of reading spiritual material, meditation, and praying as behaviors that intervene in managing the difficult situation. Catholics, but more so Christians, manifest their religious affiliation in more rooted manner than those patients who manifest other religious affiliations or those who state having no religious affiliation. These results are related to the studies conducted by Kudel *et al.*,<sup>14</sup> and Hsiao *et al.*<sup>15</sup>

This study permitted knowing the dynamics of the spiritual perspective and of the coping and adaptation process, variables that in spite of presenting a weak correlation can be identified as complementary and significant dimensions regarding the HIV/AIDS experience.

As a relevant component of caregiving, the therapeutic relationship becomes an important reference for the expression of these resources of human nature upon the HIV/AIDS experience. The conclusion of this study is that a weak, but significant relationship exists between the spiritual perspective and the coping and adaptation process, becoming resources of human nature of great relevance upon caring for the person living with HIV/AIDS.

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