Revista da Escola de Enfermagem da USP
ISSN: 0080-6234
reeusp@usp.br
Universidade de São Paulo
Brasil

Evangelista Martins, Maria; Ribeiro, Luiz Cláudio; Januzzi Feital, Thales; Alves Baracho, Rafael; Ribeiro, Mário Sérgio

Coping religioso-espiritual e consumo de alcoólicos em hepatopatas do sexo masculino

Revista da Escola de Enfermagem da USP, vol. 46, núm. 6, diciembre, 2012, pp. 1340-1347
Universidade de São Paulo
São Paulo, Brasil

Available in: http://www.redalyc.org/articulo.oa?id=361033321009

How to cite
Complete issue
More information about this article
Journal's homepage in redalyc.org

Scientific Information System
Network of Scientific Journals from Latin America, the Caribbean, Spain and Portugal
Non-profit academic project, developed under the open access initiative

Religious-spiritual coping and the consumption of alcoholic beverages in male patients with liver disease*

COPING RELIGIOSO-ESPIRITUAL E CONSUMO DE ALCOÓLICOS EM HEPATOPATAS DO SEXO MASCULINO

COPING RELIGIOSO-ESPIRITUAL Y CONSUMO ALCOHÓLICO EN HEPATÓPATAS DE SEXO MASCULINO

Maria Evangelista Martins[1],Luiz Cláudio Ribeiro[2],Thales Januzzi Feital[3],Rafael Alves, Baracho[4], Mário Sérgio Ribeiro[5]

ABSTRACT

This cross-sectional study was performed with the objective to evaluate the use of Religious Spiritual Coping (RSC) and verify its relationship with the pattern of alcoholic beverage consumption in patients attending a liver disease outpatient clinic between April and December of 2009, using the CAGE, AUDIT and RSC Scale. Associations were observed between negative religious-spiritual coping (NRSC) and the consumption of alcoholic beverages over the last year and with the resulting combination. Subjects identified as *negative CAGE with low-risk consumption* over the last year had a frequency above the expected in the category below the median. Those identified as *positive CAGE with moderate-risk consumption* were relatively more frequent in the category above the median (p=0.017). Results reinforce the relevance of the NRSC in the evaluation of health-related events.

DESCRIPTORS

Alcohol drinking
Spirituality
Religion

RESUMO

Estudo transversal realizado com o objetivo de avaliar uso do Coping Religioso-Espiritual (CRE) e verificar suas possíveis modulações com o padrão de consumo de alcoólicos em pacientes atendidos em ambulatório de hepatologia entre abril e dezembro de 2009, utilizando o CAGE, o AUDIT e a escala CRE. Foram encontradas associações entre coping religioso-espiritual negativo (CREN) e consumo de alcoólicos na vida no último ano e com a combinação resultante. Sujeitos identificados como *CAGE negativos com uso de baixo risco* no último ano tiveram frequência acima da esperada na categoria abaixo da mediana. Os identificados como *CAGE positivo com uso de médio risco* foram relativamente mais frequentes na categoria acima da mediana (p=0,017). Resultados reforçam a relevância do CREN na avaliação de eventos relacionados com a saúde.

DESCRITORES

Consumo de bebidas alcoólicas
Espiritualidade
Religião

RESUMEN

Estudio transversal realizado con el objetivo de evaluar el uso del Coping Religioso Espiritual (CRE) y verificar sus posibles modulaciones con el estándar de consumo de alcohol en pacientes atendidos en ambulatorio de hepatología entre abril y diciembre de 2009, utilizando el CAGE, el AUDIT y la escala CRE. Se encontraron asociaciones entre coping religioso espiritual negativo (CREN) y consumo de bebidas alcohólicas en la vida, en el último año y con la combinación resultante. Sujetos identificados como *CAGE negativos con abuso de bajo riesgo* en el último año tuvieron frecuencia por sobre la esperada en la categoría por debajo de la mediana. Los identificados como *CAGE positivo con abuso de mediano riesgo* fueron relativamente más frecuentes en la categoría por encima de la mediana (p=0,017). Los resultados refuerzan la importancia del CREN en la evaluación de eventos relacionados a la salud.

DESCRIPTORES

Consumo de bebidas alcohólicas
Espiritualidad
Religión

*Extracted from the dissertation "Uso de alcoólicos, personalidade, qualidade de vida e coping religioso espiritual em hepatopatas" Medical School, Federal University of Juiz de Fora, 2011.

[1]Psychologist. MSc in Health. Researcher in the Personality, Alcohol and Drugs Research Laboratory, Psychosocial Care Center at the University Hospital of Federal University of Juiz de Fora, Juiz de Fora, MG, Brazil. m.martins.jf@hotmai.com [2]PhD in Demography. Associate Professor, Statistics Department, Federal University of Juiz de Fora. Juiz de Fora, MG, Brazil. luiz.claudio@ufjf.edu.br [3]Undergraduate student in Statistics, Federal University of Juiz de Fora. Research Fellowship in the Personality, Alcohol and Drugs Research Laboratory. Juiz de Fora, MG, Brazil. thalesfeital@hotmail.com [4]Psychologist. Research Fellowship in the Personality, Alcohol and Drugs Research Laboratory. Juiz de Fora, MG, Brazil. rafael12baracho@hotmail.com [5]Psychiatric Physician. PhD in Philosophy. Associate Professor, Department of Medical Clinic, Medical School, Federal University of Juiz de Fora. Coordinator of the Personality, Alcohol and Drugs Research Laboratory. Juiz de Fora, MG, Brazil. mariosribeiro@acessa.com

Português / Inglês
www.scielo.br/reeusp

Received: 11/18/2011
Approved: 04/02/2012

INTRODUCTION

Spiritual Religious coping is defined as the use of beliefs and spiritual and religious practices as a resource to facilitate problem solving and prevent or alleviate negative emotional consequences arising from stressful circumstances in life[1-2].

A review study indicates that religious practices and beliefs are associated with physical and mental health, lower rates of depressive symptoms, anxiety and suicide[2]. The positive results of Spiritual religious coping have already been described in relation to pain, physical weakness, heart diseases, infectious diseases and cancer[3], as well as in relation to hepatitis C[4] and liver transplant patients[5].

The dysfunctional use of alcohol is a significant public health problem: it is estimated that it was the cause of 4.5% of cases of impairment and 3.8% of total deaths worldwide in 2004[6]. In an evaluation of the World Health Organization's classification of harm to health attributed to the dysfunctional use of alcohol, Brazil was ranked at level 3 in 2005 on a scale of 1 to 5. In this same year, the rate of mortality caused by cirrhosis of the liver in the Brazilian population older than 15 years old was 24.4 per 100,000 male inhabitants and 4.7 for the female population[7].

When we examine factors associated with the use of alcohol, religion has been consistently associated with lower alcohol consumption patterns. More religious individuals drink less frequently and experience fewer problems related to the use of alcohol when compared to less religious individuals[2,8].

A review of studies evaluating the association between spirituality and the use of psychoactive substances found that most studies were conducted with the North American population and that of the United Kingdom and a few studies addressed clinical populations[9].

Even though many international studies suggest there is an inverse association between the use of alcohol and Spiritual religious coping variables, there are few studies in Brazil observing this relationship since most address only adolescents and students[10].

The objective of this study was to evaluate the use of spiritual religious coping among adult patients with liver disease and verify its possible mediation of the consumption of alcohol.

Even though many international studies suggest there is an inverse association between the use of alcohol and Spiritual religious coping variables, there are few studies in Brazil observing this relationship...

METHOD

Cross-sectional study conducted with patients in the process of diagnostic evaluation or undergoing treatment in the hepatology ambulatory unit of the Gastroenterology Service of the Healthcare Center at the Federal University of Juiz de Fora (CAS-UFJF). This ambulatory is a referral facility in the region— Zona da Mata, South of Minas Gerais and Campo das Vertentes—for care provided to individuals with liver diseases of various etiologies, both alcoholic and non-alcoholic.

Inclusion criteria were: male gender, aged between 20 and 59 years old, and having attended at least up to the 5th grade. Exclusion criteria were: hepatic encephalopathy, being unable to answer the study instruments due to evident cognitive limitations, including alcohol intoxication, and refusing to sign the free and informed consent forms. This study was submitted to and approved by the Ethics Research Committee at the University Hospital at the Federal University of Juiz de Fora (protocol 0004/2009).

The following self-administered instruments were used:

1 – Structured and self-applied instrument addressing sociodemographic data.

2 – CAGE questionnaire to identify potential alcohol dependence syndrome: standardized and validated in Brazil, with sensitivity and specificity similar to the original instrument in English[11]. The participants were grouped into *never used alcohol*, *CAGE-negative* and *CAGE-positive* (affirmative answers to two or more questions).

3 – Alcohol Use Disorders Identification Test (AUDIT). Instrument developed by the World Health Organization, translated and validated for Brazil(12), to identify the dysfunctional use of alcohol in the past year. According to scores obtained on the AUDIT, the individuals were classified as: *has never had a drink containing alcohol*; *recent abstemious or low-risk user* (from 0 to 7 points); *average-risk user* (from 8 to 15 points); and *high-risk user or with likely diagnosis* of Mental Disorder related to the use of alcohol (16 or more points).

4 –Spiritual Religious Coping scale (SRC Scale) developed in Brazil[13-14]. It contains 87 statements concerning the use of 66 strategies considered to be positive spiritual religious coping and 21 strategies considered to be negative spiritual religious coping. Scores range from 1 (not at all) to 5 (very much). The SRC scale has four evaluation indexes: Positive SRC (PSRC) and Negative SRC (NSRC), Total SRC and NSRC/PSRC ratio. Higher scores in each of the three direct indexes indicate higher use of that specific

type of coping. Once it is expected a more frequent use of positive coping, lower NSRC/PSRC ratio indicates a better-balanced use of spiritual religious coping. In this study, the indexes of positive and negative spiritual religious coping and the NSRC/PSRC ratio were categorized as *below the median* and *above the median*.

Data were collected by two researchers, trained prior to the study, who attended the Hepatology ambulatory on the days and times medical appointments were scheduled. The researchers organized a list of all the patients scheduled by consulting the physicians' schedules and the patients' forms. These patients were then approached in the waiting room and were screened according to the inclusion criteria and invited to participate in the study. Those who consented were given clarification concerning the study's objectives, ethical and legal procedures, and signed free and informed consent forms.

We took all possible measures to ensure that the participants did not share or discuss the content of the instruments with their companions or those unrelated to the study. For that, a researcher was always present during the entire application of the questionnaire. Most questionnaires were answered in a single stage before the scheduled consultation. When the individual had to attend the consultation before completing the questionnaire, the researcher waited for the patient to return to the waiting room to complete the questionnaire. In 27 cases, the questionnaire was completed after the patient returned for a new consultation.

A total of 354 male patients who had appointments between April and December 2009 were approached and the selection process ceased when virtually all the patients had already been invited. Fourteen out of the 354 patients refused to participate; 156 did not meet the inclusion criteria (69 of which did not have minimum education, 80 were not included in the age group, seven were not included in the age group nor had the minimum education and nine presented evident cognitive impairment); 52 either did not complete the questionnaire or provided inconsistent answers, e.g. concomitantly reported no use of alcohol at all and alcohol consumption in the past year. Thus, there were a total of 123 participants.

All 123 individuals included in the analysis answered the four questions of the CAGE, eight or more questions of AUDIT, and at least 90% of each set of items in the Positive SRC and Negative SRC.

The database was constructed using SPSS for Windows, version 14.0 (serial number 9656438). Data were then submitted to descriptive and exploratory analysis (bivariate analysis in which spiritual religious coping is the dependent variable). Statistical significance was verified through Person's Chi-square test (results were considered significant when $p \leq 0.05$ and marginally significant when $0.1 < p > 0.05$) and through the adjusted residual (cells that present significant differences, that is, the adjusted residual with an absolute value greater than 1.96, since it is normally distributed).

For the descriptive analysis, the sociodemographic variables were grouped as follows: *age* was categorized into *20 to 29*, *30 to 39*, *40 to 49* and *50 to 59* years old; *marital status* was grouped into *single*, *married or cohabitating* and *others* (widowed, divorced, or separated); *schooling* into *bellow high school*, *incomplete or complete high school* and *incomplete college or above*; *occupation* into *active worker*, *inactive worker* (unemployed or retired) and *(employed or unemployed) student*; *income* into *less than the minimum wage (approximately US$ 300,00)*; *more than 1 until up to 3 times the minimum wage* and *more than 3 times the minimum wage*; *religion* was classified as *non-religious*, *Catholic*, *Evangelical or Protestant* and *others*; and *how frequently attend religious services* was classified as *non-religious*, *not frequently* and *frequently* (at least once a week).

For the bivariate analysis, the results from the CAGE and the AUDIT were combined and analyzed according to the resulting six subgroups: Group I (*never used alcohol*) and Group II (*CAGE negative and AUDIT from 0 to 7 points*), which constitutes the group of individuals who were not identified as potential alcohol dependents and abstemious or with a low-risk consumption in the past year; Group III (*CAGE negative and AUDIT from 8 to 15 points*) those not identified as potential alcohol dependents with an average-risk consumption in the past year; Group IV (*CAGE positive and AUDIT from de 0 to 7 points*), those individuals with potential alcohol dependence syndrome and abstemious or with low consumption in the last year); Group V (*CAGE positive and AUDIT from 8 to 15 points*), composed of individuals with potential alcohol dependence syndrome and average-risk consumption in the past year and group VI (*CAGE positive and AUDIT from 16 or more*), those with potential alcohol dependence syndrome in life and high-risk consumption or potential dependence in the past year.

RESULTS

The average age of the 123 studied patients was 42.64 (SD= 9.71) years old; 43.9% of the patients reported complete middle school and only 13% reported incomplete or complete college; 55.7% were married/cohabitated. Of the 114 who reported their occupation, 13.2% were students (employed or unemployed), 42.1% were

active workers and 44.7% were inactive workers. In regard to religion, 60.3% of the 121 patients reporting were Catholics, 15.7% were Evangelical or Protestant, 16.6% reported other religions and 7.4% reported no religion; of the 115 who reported attending religious services, 45.2% did not participate frequently and 47.0% participated in services at least once a week. The medians for the spiritual religious coping indexes were 1.95 for the NSRC, 3.01 for PSRC, and 0.65 for the NSRC/PSRC ratio.

The results of the bivariate analyses indicate that religion significantly correlated with the three indexes used to evaluate spiritual religious coping. Protestants and evangelicals were more represented among those using both positive and negative coping. Catholic participants were among those using negative coping less frequently, while non-religious individuals were significantly less represented among those making a greater use of positive coping. When the NSRC/PSRC ratio was considered, absence of religion was associated with a greater presence in the category *above the median* while those reporting a religion other than Catholicism or Protestant/Evangelical had greater representation in the category *below the median*. The category *attends religious services frequently* was significantly correlated with PSRC *above the median* and NSRC/PSRC ratio *below the median*. Both categories concerning low income were associated with the NSRC/PSRC ratio: individuals that fell on the middle category of income (between one and up to three times the minimum wage) were significantly more represented in the category *below the median* (Tables 1 and 2). The analysis of residues indicate that individuals aged between 20 and 29 years old were significantly more represented in the category *below the median* in the NSRC index and less represented in the category *above the median* in the PSRC index. Participants with more education were also more represented in the category *below the median* in the NSRC index.

Table 1 – Negative and positive spiritual religious coping (NSRC and PSRC) and socio-demographic variables

	SRC indexes	Socio-demographic variables					
		Age Range					
		20 to 29 N(%)	30 to 39 N(%)	40 to 49 N(%)	50 to 59 N(%)	Total	p-value
NSRC	Below the median	11(17.2)	14(21.9)	19(29.7)	20(31.3)	64	0.116
	Above the median	3(5.1)	14(23.7)	26(44.1)	16(27.1)	59	
	Adjusted residual[1]	+2.1	-0.2	-1.7	+0.5		
PSRC	Below the median	12(19.4)	12(19.4)	22(35.5)	16(25.8)	62	0.043*
	Above the median	2(3.3)	16(26.2)	23(37.7)	20(32.8)	61	
	Adjusted residual[2]	-2.8	+0.9	+0.3	+0.9		
		Education					p-value
		Middle school [3]	High School [4]	College [5]		Total	
NSRC	Below the median	16(25.0)	36(56.3)	12(18.8)		64	0.132
	Above the median	15(25.4)	40(67.8)	4(6.8)		59	
	Adjusted residual[1]	-0.1	-1.3	+2.0			
		Religion					p-value
		No religion	Catholic	Protestants/ Evangelical	Others	Total	
NSRC	Below the median	3(4.7)	46(71.9)	4(6.3)	11(17.2)	64	0.007*
	Above the median	6(10.5)	27(47.4)	15(26.3)	9(15.8)	57	
	Adjusted residual[1]	-1.2	+2.8	-3.0	+0.2		
PSRC	Below the median	8(12.9)	40(64.5)	4(6.5)	10(16.1)	62	0.006*
	Above the median	1(1.7)	33(55.9)	15(25.4)	10(16.9)	59	
	Adjusted residual[2]	-2.3	-1.0	+2.9	+0.1		
		Attendance of services					p-value
		Do not	Not frequently	Frequent		Total	
PSRC	Below the median	8(14.3)	29(51.8)	19(33.9)		56	0.005*
	Above the median	1(1.7)	23(39.0)	35(59.3)		59	
	Adjusted residual[2]	-2.5	-1.4	+2.7			

*p-value<0.05 [1]Adjusted residual concerning frequency below the median (1.95) [2]Adjusted residual concerning frequency above the median (3.01)
[3]Complete or incomplete Middle School [4]Complete or incomplete High School [5]Incomplete college or graduate studies

Table 2 – Ratio between negative and positive spiritual religious coping (NSRC/PSRC) and socio-demographic variables

		Socio-demographic variables				
		Income - minimum wage (MW)				
		Up to 1 times MW	1 to 3 times MW	More than 3 times MW	Total	p- value
Ratio	Below the median	16(27.6)	30(51.7)	12(20.7)	58	
	Above the median	33(56.9)	19(32.8)	6(10.3)	58	0.006*
	Adjusted residual[1]	-3.2	+2.1	+1.5		
		Religion				
		No religion	Catholic	Protestant/Evangelical	Others	Total	p- value
Ratio	Below the median	1(1.7)	36(60.0)	9(15.0)	14(23.3)	60	
	Above the median	8(13.1)	37(60.7)	10(16.4)	6(9.8)	61	0.034*
	Adjusted residual[1]	-2.4	-0.1	-0.2	+2.0		
		Attendance of services				
		Do not	Not frequently	Frequently	Total	p- value
Ratio	Below the median	1(1.8)	23(40.4)	33(57.9)	57	
	Above the median	8(13.8)	29(50.0)	21(36.2)	58	0.012*
	Adjusted residual[1]	-2.4	-1.0	+2.3		

*p-value<0.05 11Adjusted residual concerning frequency below the median (0.65)

The bivariate analysis between the use of alcohol and negative and positive spiritual religious coping presented statistical significance both for the NSRC and PSRC indexes (p-values 0.017 and 0.004 respectively). The individuals identified as negative CAGE were more frequently observed in the categories *below the median* for both NSRC and PSRC while the results indicated the opposite for those identified as positive CAGE (Table 3).

Table 3 – Spiritual religious coping and the use of alcohol

Indexes of Spiritual religious coping – SRC scale		CAGE classification			Total	p-value
		Never used alcohol N (%)	Negative N(%)	Positive N(%)		
NSRC	Below the median	7 (10.9)	36 (56.3)	21 (32.8)	64	0.004*
	Above the median	9 (15.3)	16 (27.1)	34 (57.6)	59	
	Adjusted residual[1]	-0.7	+3.3	-2.8		
PSRC	Below the median	9 (14.5)	33 (53.2)	20 (32.3)	62	0.017*
	Above the median	7 (11.5)	19 (31.1)	35 (57.4)	61	
	Adjusted residual[2]	-0.5	-2.5	+2.8		
Ratio NSRC/ PSRC	Below the median	7 (11.3)	29 (46.8)	26 (41.9)	62	0.578
	Above the median	9 (14.8)	23 (37.7)	29 (47.5)	61	
	Adjusted residual[3]	-0.6	+1.0	-0.6		

*p<0.5 [1]Adjusted residual concerning frequency below the median [2]Adjusted residual concerning frequency above the median [3]Adjusted residual concerning frequency below the median

When the use of alcohol for the last year was taken into account, the results indicated marginal statistical significance (p = 0.090) only for the NSRC index. However, when the adjusted residual was taken into account, the individuals identified as *abstemious or of low risk* were more frequently represented in the category *below the median* concerning the use of negative spiritual religious coping (Table 4).

Table 4 – Spiritual religious coping and the consumption of alcohol in the last year

Spiritual Religious coping indexes – SRC scale		AUDIT classification				Total	p-value
		Never used alcohol N (%)	Abstemious or low risk N (%)	Average risk N (%)	High risk or likely dependency N(%)		
NSRC	Below de median	7 (10.9)	N (%)	N (%)	2 (3.1)	64	0.090**
	Above de median	9 (15.3)			7 (11.9)	59	
	Adjusted residual[1]	-0.7			-1.9		
CREP	Below de median	9 (14.5)	35 (56.5)	15 (24.2)	3 (4.8)	62	0.704
	Above de median	7 (11.5)	32 (52.5)	16 (26.2)	6 (9.8)	61	
	Adjusted residual[2]	-0.5	-0.4	+0.3	+1.1		
Razão CREN/ CREP	Below de median	7 (11.3)	39 (62.9)	13 (21.0)	3 (4.8)	62	0.278
	Above de median	9 (14.8)	28 (45.9)	18 (29.5)	6 (9.8)	61	
	Adjusted residual[3]	-0.6	+1.9	-1.1	-1.1		

**0.5<p<0.1 [1]Adjusted residual concerning frequency below the median [2] Adjusted residual concerning frequency above the median [3] Adjusted residual concerning frequency below the median

The variable resulting from the combination of results obtained in the CAGE and the AUDIT presented statistically significant differences in relation to the use of negative spiritual religious coping (p= 0.017). Individuals identified as *negative CAGE and with a low risk* in the past year presented a frequency above that expected for the category *below the median* while those identified as *positive CAGE and with average risk* were relatively more frequently categorized as *above the median* (Table 5).

Table 5 – The use of spiritual religious coping and the consumption of alcohol in the last year

Spiritual religious coping indexes – SRC scale		Joint classification CAGE and AUDIT						Total	p-value
		Group I N(%)	Group II N(%)	Group III N(%)	Group IV N(%)	Group V N(%)	Group VI N(%)		
NSRC	Below de median	7 (10.9)	29 (45.3)	7 (10.9)	12 (18.8)	7 (10.9)	2 (3.1)	64	
	Above de median	9 (15.3)	14 (23.7)	2 (3.4)	12 (20.3)	15 (25.4)	7 (11.9)	59	0,017*
	Adjusted residual[1]	-0.7	+2.5	+1.6	-0.2	-2.1	-1.9		
PSRC	Below de median	9 (14.5)	26 (41.9)	7 (11.3)	9 (14.5)	8 (12.9)	3 (4.8)	62	
	Above de median	7 (11.5)	17 (27.9)	2 (3.3)	15 (24.6)	14 (23.0)	6 (9.8)	61	0,107
	Adjusted residual[2]	-0.5	-1.6	-1.7	+1.4	+1.5	+1.1		
Ratio NSRC/ PSRC	Below de median	7 (11.3)	24 (38.7)	5 (8.1)	15 (24.2)	8 (12.9)	3 (4.8)	62	
	Above de median	9 (14.8)	19 (31.1)	4 (6.6)	9 (14.8)	14 (23.0)	6 (9.8)	61	0,407
	Adjusted residual[3]	-0.6	+0.9	+0.3	+1.3	-1.5	-1.1		

*P<0.5 [1]Adjusted residual concerning frequencies below the median [2]Adjusted residual concerning frequencies above the median [3]Adjusted residual concerning frequencies below the median Group I: never used alcohol Group II: negative CAGE and low-risk use Group III: negative CAGE and average-risk use Group IV: positive CAGE and low-risk use Group V: positive CAGE and average-risk use Group VI: CAGE positive and high-risk use

DISCUSSION

Spiritual religious coping and sociodemographic variables

This study's findings— the relatively less frequent use of religious and spiritual mechanisms to cope with stressful events on the part of patients aged between 20 and 29 years old— corroborate the conclusion of an American national survey[15] reporting a low probability of younger individuals being more religious than older individuals. We should, however, note that the less frequent use of religious coping was balanced between the positive and negative dimensions of the SRC scale. Such a fact is confirmed by the non-significance of differences when the NSRC/PSRC ratio is considered.

As opposed to the results found by a study[16] using a probabilistic sample of the Brazilian population, which did not find an association between income and religious variables, the results presented here indicate significant differences concerning the pattern of use of Spiritual religious coping among the individuals: those within the lower income category (at most one minimum wage) were frequently observed, above what was expected, in the category *above the median* in the NSRC/PSRC ratio, while individuals with income between one and three times the minimum wage presented the inverse behavior. Such a result suggests the role of positive and negative factors in different combinations for these two subgroups.

The higher frequency of Protestants and Evangelicals among patients with a greater use of both positive and negative religious coping coincides with the findings of a study[17] reporting the same pattern of spiritual religious coping among members of the Evangelical churches when exposed to negative events affecting their life cycle.

It is not unusual to find individuals who report having no religion but still have spiritual beliefs and behavior, even if not linked to an organized religion[15]. The patients in this study reporting no religion presented relatively less frequent Spiritual religious coping than those reporting a religion. Moreover, the results indicate a more predominant use of negative coping strategies than in the first group, which include negative reevaluation of the idea of God and/or dissatisfaction with religious institutions[13-14].

Association between high attendance of religious services and the use of PSRC indicates the involvement of strategies that go from a positive relationship with the idea of God and religious rituals to a personal transformation and offering help to another[13-14].

Spiritual religious coping and the use of alcohol

The use of both positive and negative spiritual religious coping on the part of studied patients with liver disease is coherent with studies reporting that stressful life events can mobilize the use of both positive and negative SRC[1,18-19]. A person may perceive the stressful experience as an opportunity for personal growth and becoming closer to God or interpret it as His abandonment or punishment of the individual[20]. Considering the categorization of the studied patients according to the CAGE, the negative CAGE individuals had greater representation in the category *below the median* in the NSRC and PSRC, while the positive CAGE were more frequently observed in the category *above the median* in these two dimensions. The use of the two dimensions was, however, balanced for both the positive and negative CAGE individuals given the non-significance of differences found for the NSRC-PSRC ratios. The less frequent use of spiritual religious coping by individuals considered likely

non-dependents - and the opposite for the likely alcohol-dependents - may, at first, seem contradictory given studies reporting that more religious individuals tend to consume less alcohol[8,21]. Nonetheless, if we consider the frequency individuals turn to their faith in the face of illnesses and stressful events in life, these results[2,18,22] can be more easily understood. Considering that all the participants in this study had liver disease and alcohol dependence may be considered as an additional problem - for the positive CAGE group - these results are consistent with findings indicating the use of spiritual religious coping in direct proportion to the number of physical or mental health problems[18].

The analysis of spiritual religious coping in relation to the use of alcohol in the year preceding the study, by the adjusted residual, only showed a less frequent use of negative coping among abstemious patients or those with a low-risk consumption (Table 4). This pattern was also identified among negative CAGE and abstemious patients or those with a low consumption of alcohol in the past year (Group II). We also verified a more frequent use of negative coping among those with consumption, indicating a likely alcohol dependence and with an average-risk consumption in the past year for this combined variable (Group V) (Table 5).

Some authors suggest that the frequent use of negative coping strategies are more harmful in their effects or even more harmful to health than the same frequency of positive coping would be beneficial[1,18-20]. Even though most studies report the beneficial effects of positive coping, this study's results reinforce the influence of negative coping in distinguishing the subgroups of more and less severe patients. In fact, various researchers have identified an association between more frequent use of negative coping and worse outcomes in both physical and mental health[1,18]. The beneficial effect to health would be associated with a ratio of at least 1NSRC to 2 PSRC[13].

It is possible that the low number of individuals in some cells of the combined variable limited the observation of statistically significant differences for some subgroups. The use of alcohol compatible with non-dependence and low-risk consumption in the past year, however, seems to indicate there is a clinically relevant correlation with the use of negative coping strategies.

LIMITATIONS

Not being possible to measure how severe the disease was at the time of data collection was an important limitation imposed on this study, hindering discussions concerning the relationship between clinical condition and spiritual religious coping. This limitation is due to restrictions in the institution itself at the time the study was conducted: the institution limited laboratory exams outside of the facility's care protocol. These evaluations were permitted only for patients with a more severe clinical condition. Obviously, the cross-sectional design and the use of patients with liver disease under treatment hinder both causal inference and the generalization of results. Another limitation to be considered was the small number of individuals in certain subgroups, especially in the subgroup with greater alcoholic severity evaluated by the AUDIT.

CONCLUSION

This study's results reinforce previous studies reporting differences in the use of Spiritual religious coping among different religions and that it is more frequently used by individuals who attend religious services more regularly. When the use of negative and positive religious coping was evaluated in the different subgroups in relation to the consumption of alcohol, the results indicate differences in the use of negative strategies. These results reinforce the importance of discussing not only the use of PSRC but also the use of NSRC when considering the potential mediation of spiritual religious coping for physical and mental health. One should consider not only the positive aspects of religion but also its use with undesirable results for the health conditions of patients.

Since the use of spiritual religious practices can contribute to preventing or alleviating physical and mental consequences of stressful circumstances, as is the case of different clinical circumstances nursing professionals observe with their patients. The results of this study also contribute to increasing nursing knowledge concerning the relationship between alcohol consumption patterns and the use of spiritual religious coping among patients with liver disease. These results reinforce the importance of paying special attention to the possibility of negative SRC strategies when planning integral care to patients cared for by the nursing staff due to the worse outcomes associated with the use of negative coping strategies.

REFERENCES

1. Koenig HG, Pargament KI, Nielsen J. Religious coping and health status in medically ill hospitalized older adults. J Nerv Ment Dis. 1998;186(9):513-21.

2. Koenig HG. Research on religion, spirituality, and mental health: a review. Can J Psychiatry. 2009;54(5):283-91.

3. Koenig HG. Religion and medicine IV: religion, physical health, and clinical implications. Int J Psychiatry Med. 2001;31(3):321-36.

4. Raghavan R, Ferlic-Stark CC, Rungton M, Goodgame R. The role of patient religiosity in the evaluation and treatment outcomes for chronic HCV infection. J Relig Health [Internet]. 2011 [cited 2011 Apr 10]. Available from: http://www.springerlink.com/content/18570637021k0570/fulltext.pdf

5. Bonaguidi F, Michelassi C, Filipponi F, Rovai D. Religiosity associated with prolonged survival in liver transplant recipients. Liver Transpl. 2010;16(10):1158-63.

6. World Health Organization. Global Strategy to reduce the harmful use of alcohol. Geneva: World Health Organization, 2010.

7. World Health Organization (WHO). Global Status Report on Alcohol and Health. Geneva; 2011.

8. Nonnemaker JM, McNeely CA, Blum RW. Public and private domains of religiosity and adolescent health risk behaviors: evidence from the National Longitudinal Study of Adolescent Health. Soc Sci Med. 2003;57(11):2049-54.

9. Cook CCH. Addiction and spirituality. Addiction. 2004;99(5):39-51.

10. Moreira-Almeida A, Lotufo Neto F, Koenig HG. Religiousness and mental health: a review. Rev Bras Psiquiatr. 2006;28(3):242-50.

11. Masur J, Monteiro MG. Validation of the "CAGE" alcoholism screening test in a brazilian psychiatric inpatient hospital setting. Braz J Med Biol Res. 1983;16(3):189-282.

12. Mendez EB. Uma versão brasileira do AUDIT - Alcohol Disorders Identification Test. [dissertação]. Pelotas: Universidade Federal de Pelotas; 1999.

13. Panzini RG. Escala CRE: tradução, adaptação e validação da escala RCOPE, abordando relações com saúde e qualidade de vida [dissertação]. Porto Alegre: Instituto de Psicologia, Universidade Federal do Rio Grande do Sul; 2004.

14. Panzini RG, Bandeira DR. Escala de coping religioso/espiritual (escala CRE): elaboração e validação de construto. Psicol Estudo. 2005;10(3):507-16.

15. Michalak L, Trocki K, Bond J. Religion and alcohol in the U.S. National Alcohol Survey: how important is religion for abstention and drinking? Drug Alcohol Depend. 2007;87(2-3):268-80.

16. Moreira-Almeida A, Pinsky I, Zaleski M, Laranjeira R. Envolvimento religioso e fatores sociodemográficos: resultados de um levantamento nacional no Brasil. Rev Psiq Clin. 2010;37(1):12-5.

17. Bjorck JP, Thurman J. Negative life events, patterns of positive and negative religious coping, and psychological functioning. J Sci Study Relig. 2007;46(2):159-67.

18. Pargament KI, Smith BW, Koenig HG, Perez LM. Patterns of positive and negative religious coping with major life stressors. J Sci Study Relig. 1998;37(4):710-24.

19. Bousso RS, Poles K, Serafim TS, Miranda MG. Religious beliefs, illness and death: family's perspectives in illness experience. Rev Esc Enferm USP [Internet]. 2011 [cited 2011 Apr 10];45(2):397-403. Available from: http://www.scielo.br/pdf/reeusp/v45n2/en_v45n2a13.pdf

20. Pargament KI, Koenig HG, Tarakeshwor N, Hahn J. Religious struggle as a predictor of mortality among medically ill elderly patient: A two-year longitudinal study. Arch Intern Med. 2001;161(15):1881-5.

21. Border TF, Curran GM, Mattox R, Booth BM. Religiousness among at-risks drinkers: is it prospectively associated with the development or maintenance of an alcohol-use disorders. J Study Alcohol Drugs. 2010;71(1):136-42.

22. Silva MS, Kimura M, Stelmach R, Santos VLCG. Quality of life and spiritual well-being in chronic obstructive pulmonary disease patients. Rev Esc Enferm USP [Internet]. 2009 [cited 2011 Apr 10];43(spe 2):1187-92. Available from: http://www.scielo.br/pdf/reeusp/v43nspe2/en_a07v43s2.pdf

Correspondence addressed to: Maria Evangelista Martins
Rua Francisco Vaz de Magalhães -910/302
CEP 36033-340 - Juiz de Fora, MG, Brazil