

Relationship between Spirituality, Religiosity, and Alcohol Consumption among Older Adults*

* Article that resulted from the doctoral thesis entitled: “Modelo de vulnerabilidad, autotranscendencia y consumo de alcohol y benzodiazepinas en adultos mayores de Nuevo Laredo, Tamaulipas (Model of vulnerability, self-transcendence, and alcohol and benzodiazepine consumption in older adults in Nuevo Laredo, Tamaulipas)” from the School of Nursing at the Universidad Autónoma de Nuevo León.

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Theme: Promotion of health, well-being, and quality of life

Contribution to the discipline: This study significantly contributes to the nursing discipline by enabling the provision of holistic, individualized care, identifying protective or risk factors relating to mental and physical health and the well-being of older adults. It also promotes comprehensive, ethical, respectful and culturally sensitive interventions that consider the values and beliefs of this population. This approach improves quality of life and overall well-being, strengthening the humanistic and ethical role of nursing in holistic geriatric care. The research is based on Pamela Reed's theory of self-transcendence.

Abstract

Introduction: Alcohol consumption among older adults is increasing, which has an impact on their physical, emotional, cognitive and social health. Therefore, it is necessary to identify possible protective factors, such as spirituality and religiosity, to contribute relevant knowledge to the nursing care of geriatric patients. **Objective:** To determine the relationship between spirituality, religiosity, and alcohol consumption among older adults. **Materials and Methods:** This descriptive-correlational study involved a sample of 286 adults aged over 60 from Nuevo Laredo, Tamaulipas, Mexico. Stratified random probability sampling was employed. The following instruments were used: the Brief and Portable Mental Status Questionnaire; the Personal Data and Alcohol Consumption Prevalence Form; the Spiritual Perspective Scale; the Duke University Religion Index; and the Michigan Alcoholism Screening Test Geriatric Version. Data were collected in two medical clinics and three development and wellness centers. **Results:** A negative but significant correlation was found between spirituality ($r_s = -0.368, p < 0.01$) and religiosity ($r_s = -0.473, p < 0.01$) and alcohol consumption. **Conclusions:** Spirituality and religiosity are associated with lower alcohol consumption among older adults. These findings enable the development of cultural interventions aimed at promoting the health of older adults, thereby improving their quality of life and overall well-being.

Keywords (Source: DeCS)

Older adults; spirituality; religion; alcohol consumption; nursing.

4 Relación entre espiritualidad, religiosidad y consumo de alcohol en adultos mayores*

* Artículo derivado de tesis doctoral titulada: "Modelo de vulnerabilidad, autotranscendencia y consumo de alcohol y benzodiazepinas en adultos mayores de Nuevo Laredo Tamaulipas", de la Facultad de Enfermería de la Universidad Autónoma de Nuevo León.

Resumen

Introducción: el consumo de alcohol en adultos mayores se encuentra en aumento, lo que afecta su salud física, emocional, cognitiva y social; por lo tanto, es necesario identificar posibles factores de protección como la espiritualidad y la religiosidad, para aportar conocimiento trascendente en el cuidado de enfermería del paciente geriátrico. **Objetivo:** determinar la relación entre la espiritualidad y la religiosidad con el consumo de alcohol en adultos mayores. **Materiales y métodos:** estudio descriptivo-correlacional con una muestra de 286 adultos, mayores de 60 años, de Nuevo Laredo, Tamaulipas, México; el muestreo fue probabilístico aleatorio estratificado. Se utilizó el Cuestionario Breve y Portátil sobre el Estado Mental, una Cédula de Datos Personales y de Prevalencias de Consumo de alcohol, la Escala de Perspectiva Espiritual, el Índice de Religión de la Universidad de Duke y la Prueba de Detección de Alcoholismo de Michigan-Versión Geriátrica. La recolección de datos se llevó a cabo en dos clínicas médicas y tres centros de desarrollo y bienestar. **Resultados:** se encontró una relación negativa significativa de la espiritualidad ($r_s = -,368, p < ,01$) y la religiosidad ($r_s = -,473, p < ,01$) con el consumo de alcohol. **Conclusiones:** se encontró que la espiritualidad y la religiosidad se relacionan con menor consumo de alcohol entre los adultos mayores; estos datos permitirán diseñar intervenciones sensibles culturalmente, con enfoque en promoción de la salud para el adulto mayor, los cuales contribuyen a una mejor calidad de vida y al bienestar en general.

Palabras clave (Fuente DeCS)

Adultos mayores; espiritualidad; religión; consumo de bebidas alcohólicas; enfermería.

Relação entre espiritualidade, religiosidade e consumo de álcool entre idosos*

*Artigo derivado da tese de doutorado intitulada “Modelo de vulnerabilidad, autotranscendencia y consumo de alcohol y benzodiazepinas en adultos mayores de Nuevo Laredo Tamaulipas”, da Faculdade de Enfermagem da Universidad Autónoma de Nuevo León.

Resumo

Introdução: O consumo de álcool em idosos está aumentando, o que afeta sua saúde física, emocional, cognitiva e social; portanto, é necessário identificar possíveis fatores de proteção, como espiritualidade e religiosidade, para oferecer conhecimento transcendente no cuidado de enfermagem de pacientes geriátricos. **Objetivo:** determinar a relação entre espiritualidade e religiosidade com o consumo de álcool em idosos. **Materiais e métodos:** estudo descritivo-correlacional com uma amostra de 286 pessoas com mais de 60 anos de Nuevo Laredo, Tamaulipas, México. A amostragem foi estratificada de probabilidade aleatória. Foram usados o Questionário Curto e Portátil sobre o Estado Mental, um Índice de Dados Pessoais e um Índice de Prevalência de Consumo de Álcool, a Escala de Perspectiva Espiritual, o Índice de Religião da Universidade de Duke e o Teste de Detecção do Alcoolismo de Michigan - versão geriátrica. A coleta de dados foi realizada em duas clínicas médicas e três centros de desenvolvimento e bem-estar. **Resultados:** Foi encontrada uma relação negativa, porém significativa, entre espiritualidade ($r_s = -0,368$, $p < 0,01$) e religiosidade ($r_s = -0,473$, $p < 0,01$) com o consumo de álcool. **Conclusões:** Foi constatado que espiritualidade e religiosidade estão relacionadas à menor consumo de álcool entre idosos; esses dados permitirão formular intervenções culturalmente sensíveis com foco na promoção da saúde dos idosos, as quais contribuirão para uma melhor qualidade de vida e bem-estar em geral.

Palavras-chave (Fonte DeCS)

Idosos; espiritualidade; religião; consumo de bebidas alcoólicas; enfermagem.

Introduction

The consumption of psychoactive substances, particularly alcohol, among older adults is a growing public health problem, since its impact has proven to be more serious than initially recognized by health authorities (1). An older adult is defined as someone who has reached a stage in life where biological, psychological and social changes associated with ageing occur. These changes generally start at around the age of 60 years in developing countries such as Mexico, and around the age of 65 years in developed countries (2, 3). This population is particularly vulnerable to mood swings, cardiovascular disease and memory problems, conditions that are exacerbated by alcohol consumption (1).

This situation could be explained in part by the fact that some older adults started drinking alcohol at a young age and continued this behavior into adulthood, gradually increasing their consumption until they developed risky or excessive drinking habits and symptoms of alcohol use disorder (4). In old age, one would expect consumption to reduce or cease due to the onset of various diseases, especially chronic ones, and the recommendations of healthcare professionals. However, the authors of the study and previous studies have observed that alcohol consumption continues in older adults and is often mistaken for a geriatric syndrome. Due to the lack of national and international data on this issue, further research into this behavior is necessary to inform care and prevention strategies for this problem in older adults (5- 7).

Worldwide, it has been documented that alcohol consumption increases the risk of premature death in adults over 60 by 33% (8). In Mexico, according to data from the Observatorio Mexicano de Salud Mental y Adicciones (2024), older adults are those who are at the highest risk of alcohol-related death, at a rate of 4.6 per 100,000 people. Men over the age of 60 comprise the group at highest risk (9).

Regarding the estimation of the consumption of this substance, 11% of adults in the United States over the age of 21 have experienced at least one episode of excessive consumption, while in Mexico, the 2022 National Health and Nutrition Survey (ENSANUT, for its initials in Spanish) revealed that 48.8% of adults aged 50 to 64 and 32.1% of adults over 65 currently drink alcohol. The National Survey on Drug, Alcohol, and Tobacco Use (ENCODAT, for its initials in Spanish) revealed that 37.4% of people in the 18-65 age group had consumed alcohol excessively in the last year, 22.1% in the last month and 3% daily. However, no data are available for adults over 65, a critical issue requiring attention, given the rapid growth of this age group at national and international levels (12).

Alcohol consumption among older adults is exacerbated by the physiological changes associated with ageing. These changes include higher blood alcohol concentrations, alterations to the vascular system, a moderate decrease in renal glomerular filtration rate,

and a reduction in muscle mass. All of these physiological changes increase the risk of morbidity compared to young adults (13). Furthermore, problematic alcohol consumption in older adults negatively impacts their emotional, cognitive, functional and social health (14). Several studies have identified various risk factors for alcohol consumption in this population, including stressful life events such as the loss of children, partners, family or friends, retirement, financial difficulties, moving in with children, lack of social support, and feelings of sadness or loneliness (15).

However, there is less evidence regarding protective factors against alcohol consumption. Particularly, spirituality and religiosity have been identified as two elements that can play an important role in preventing this behavior. Spirituality is defined as an individual's perception of their inner identity and connection to a higher being or God. This connection can provide feelings of peace and security, as well as improve coping skills and promote hope and healthy decision-making (18).

Spirituality is also considered a motivating force that encourages people to seek peace, tranquility, and serenity that are expressed in accordance with the spiritual beliefs of the older adult. It is associated with adopting healthy habits, which can lead to an increased sense of well-being and reduced alcohol consumption. A positive correlation has been documented between spirituality and healthy habits in older adults in Poland, suggesting that spirituality may play a protective role against risky behaviors such as alcohol consumption (20). Similarly, older adults in the United States who reported high levels of spirituality were found to be less likely to drink alcohol (21, 22). Nevertheless, no significant relationship was found between spirituality and alcohol consumption in older adults in the metropolitan area of Monterrey, Nuevo León (23).

Religiosity is defined as the pursuit of a connection with God, or a higher power, through religious practices, beliefs, and activities, which vary according to the religion professed and are influenced by family, reference groups, and society in general (24). Religiosity can function as a coping strategy in older adults as it has been shown to promote psychological and social well-being, as well as adaptation to health problems and risky behaviors, including alcohol consumption (25). From this perspective, a significant negative correlation was identified between religiosity and alcohol consumption among older adults in the Monterrey metropolitan area, suggesting that religiosity may act as a protective factor. Likewise, in the United States, frequent attendance at religious services and high levels of religiosity were associated with a lower likelihood of alcohol-related problems among older adults (21).

As can be seen, information on alcohol consumption among the Mexican older adult population is limited, and studies that analyze the role of spirituality and religiosity as possible protec-

tive factor, or risk factor, for alcohol consumption are even scarcer. Therefore, this study aims to: 1) Describe the prevalence of alcohol consumption; 2) Identify the types of alcohol consumption; 3) Determine the types of alcohol consumption by sex; and 4) Determine the relationship between spirituality, religiosity, and alcohol consumption in older adults at the northern border of Tamaulipas.

Method

A descriptive correlational study was performed. The study population consisted of 1,959 older adults, with ages ranging between 60 and 80, who attended two family medicine clinics and three development and welfare centers in the municipality of Tamaulipas, Nuevo Laredo, located at the northern border with the United States. The study was performed in accordance with the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) guidelines to ensure an accurate description of the study design and participant selection method. A detailed description of the instruments used to measure the study variables was provided, as were explanations of the inclusion criteria, data collection process, and the statistical methods used for the analysis. The results were presented clearly and transparently (26).

The sample size was estimated for a multiple linear regression model with a significance level of 0.05, a confidence level of 95 %, a power of 90 %, a coefficient of determination of 0.09 and a non-response rate of 15%. Probabilistic, random, stratified sampling was used, with the size of each stratum being proportional to its population size. Location and sex were combined to form ten strata. A total sample of 286 older adults was finally determined. Participants were randomly selected from lists of older men and women using Excel.

The data collection process began when the study authors – qualified nurses who had undergone training in the use of the measurement instruments – approached older adults at two health clinics and three development and wellness centers, to invite them to participate. The study objectives, the data collection procedure, the instruments to be used and the estimated response time of 20 minutes were explained. Once participants had agreed to participate, they were taken to a private location designated by the institutions, where they were asked a couple of questions to verify their time and place awareness: “What day of the week is it today?” and “Where are we now?” The objective was to verify their temporal and spatial orientation.

Next, they were given the Spanish-language version of Pfeiffer’s Brief and Portable Mental Status Questionnaire (1975), adapted by Martinez (2001). Consisting of ten questions, this questionnaire is designed to assess cognitive ability and short-term memory, as well as determine orientation regarding everyday activities and events (27). According to the interpretation of the results, those

who make 0-2 errors have normal cognitive ability, 3-4 errors indicate mild impairment, 5-7 errors indicate moderate impairment, and more than 8 errors indicate severe impairment. The inclusion criteria were older adults who could read and write, and with a maximum of two errors on the mental status questionnaire. Those with more than three errors or who could not read or write were excluded from the study, but thanked for their willingness to participate.

The data collection process continued with the reading of the informed consent to the older adults who met the inclusion criteria, and their signature for approval. The instruments were then handed to them in an envelope, along with instructions on how to complete them. They were informed at all times that they could ask the study authors any questions they might have. At the end, the instruments were collected, and the participants were thanked for their participation and given a healthy snack.

Subsequently, the Personal Data and Alcohol Consumption Prevalence Form (PDACPF) and three other instruments were administered. The PDACPF collected sociodemographic data such as age, sex, occupation, level of education, who the older adult lives with and their religion, as well as information on the age at which they started consuming alcohol, how often and how much they drink, and how prevalent alcohol consumption is in their life (i.e., whether they have ever consumed alcohol, in the last year, month or week).

Next, the Spiritual Perspective Scale, which was designed by Reed (1986) was administered. This scale measures a person's perception of their inner identity, the strength of their spiritual beliefs and their connection to a supreme being (16). The scale consists of ten statements divided into two subscales. The first subscale, "Spiritual Practices," consists of four questions (1 to 4) rated on a scale from 1 to 6. The responses are based on the following criteria: 1) Never, 2) Less than once a year, 3) About once a year, 4) About once a month, 5) About once a week and 6) About once a day. The second subscale, "Spiritual Beliefs," consists of six questions (5 to 10) which are answered as follows: 1) Strongly disagree, 2) Disagree, 3) Disagree more than agree, 4) Agree more than disagree, 5) Agree, and 6) Strongly agree.

The total score for the instrument is 60, so an index was calculated to provide a clearer interpretation of the results. The author of the instrument obtained it from a sample of 300 adults and older adults in the south-eastern United States, achieving a Cronbach's alpha of 0.90 (18). Additionally, (28) translated the instrument into Spanish with the help of experts and applied it to 51 Mexican older adults, obtaining a Cronbach's alpha of 0.91. In a study of 251 older adults in Monterrey, Mexico, (29) reported an overall Cronbach's alpha of 0.90. However, in the present study, a reliability of .94 was observed.

The second instrument used was the Duke University Religion Index (DUREL) (30), which was designed to ascertain older adults' religious beliefs by investigating their perception of God or a supreme being in religious practices, manifestations, and activities. The instrument consists of five items divided into three dimensions: 1) Organizational Religious Activity (ORA), item 1; 2) Non-Organizational Religious Activity (NORA), item 2; and 3) Intrinsic Religiosity (IR), items 3, 4 and 5.

The first questionnaire relates to the ORA dimension, involving public religious activities such as attending services or participating in group-related religious activities. The second questionnaire belongs to the NORA dimension and consists of private religious activities, such as praying, studying the Holy Scriptures, watching religious television programs or listening to religious radio. Items three to five are part of the IR dimension, which assesses internalization and personal religious experience. Items three to five are scored from 1 to 5 or 1 to 6, and scores for the three dimensions (ORA, NORA and IR) can be analyzed separately or added together to obtain a total score ranging from 5 to 27. This indicates the level of religiosity; that is, the higher the score, the greater the religiosity. The authors of the instrument reported a Cronbach's alpha of 0.75.

The Spanish validation study—conducted with 243 Spanish-speaking Hispanic American women in San Diego, United States—obtained a Cronbach's alpha value of 0.77. In this study, item number two (31) was reversed. In a sample of 600 Brazilian adults, the Cronbach's alpha coefficient was 0.74 (32). Among a Mexican population of 39 older adults from Monterrey, Nuevo León, the Cronbach's alpha value was 0.83 (23). The internal consistency in this study was 0.84.

Finally, the Michigan Alcoholism Screening Test, Geriatric Version (MAST-G) was administered (33). This test was specifically developed to assess and detect alcohol consumption in older adults who have consumed alcohol at some point in their lives. The 24-item instrument has a dichotomous response pattern (yes or no) and a cutoff score of 5, meaning a score above 5 indicates alcohol abuse. Scores are classified as follows: 1) sensible or low-risk consumption (0-1 point), 2) risky consumption (2-4 points) and 3) abusive consumption or probable alcoholism (more than 5 points).

Validation of the Spanish version of the instrument for use with the Mexican population was conducted with 112 older adults from Monterrey in the Mexican state of Nuevo León. As the scale is dichotomous, the Kuder-Richardson (KR-20) coefficient was used to estimate the instrument's reliability, which was found to be 0.81 (34). Similarly, a KR-20 of 0.83 was obtained in 251 older adults from Monterrey, Nuevo León, in 2020 (29); in this study, a reliability of 0.88 was found.

This study complied with the provisions of Mexico's General Health Law on Health Research (35) by consistently respecting the digni-

ty and integrity of the elderly; moreover, informed consent was obtained, anonymity and confidentiality were guaranteed, and mental capacity was confirmed. It was also approved by the Research Ethics and Research Committees of the School of Nursing at the Universidad Autónoma de Nuevo León (registration number FAEN-D2031).

Data analysis was performed using version 24 of the Windows software called Statistical Package for the Social Sciences (SPSS). Both descriptive and inferential statistics were employed, and the Kolmogorov–Smirnov test with Lilliefors correction was used to assess the normality of the variables. It was therefore decided to use nonparametric statistics, such as Pearson’s chi-square test and Spearman’s correlation coefficient, to meet the study objectives.

Results

Of the older adults, 68% were women with a mean age of 67.8 years (SD = 6.17). In terms of education, the mean for years of schooling was 12.41 (SD = 5.79), where the largest group (32.5%) completed a bachelor’s degree; 64% were married or living with a partner; 46% were retired. Concerning religion, 78% were Catholic, 13% were Christian, 6% were Jehovah’s Witnesses, or followed other religions, and 3% did not practice any religion.

Regarding alcohol consumption, the average age at which consumption began was reported to be 20.32 years (SD = 6.39), with 3.76 standard drinks being consumed on a typical day (SD = 2.93). The first objective was to describe the prevalence of alcohol consumption. The results showed that 71.3% of participants had consumed alcohol at some point in their lives (95% CI: 66-77), followed by 47.9% who had consumed alcohol in the last year (95% CI: 42-54), 33.6% who had consumed alcohol in the last month (95% CI: 28-39), and 22% who had consumed alcohol in the last week (95% CI: 17-27) (see Table 1).

Table 1. Overall, Lifetime, Current, and Instantaneous Prevalence of Alcohol Consumption

Alcohol Consumption Prevalence	Yes		No		95% CI	
	f	%	f	%	LL	UL
At any point in their life	204	71.3	82	28.7	66	77
In the last year	137	47.9	149	52.1	42	54
In the last month	96	33.6	190	66.4	28	39
In the last week	63	22.0	223	78.0	17	27

Note: f = Frequency, % = Percentage, n = 286, LL = Lower Limit, UL = Upper Limit

Source: Prepared by the authors.

Regarding the second objective, which involved identifying types of alcohol consumption as reported by the MAST-G, results showed that 38.2% (95% CI: 33-44) of older adults were categorized as sensible or low-risk consumers, 29.9% (95% CI: 24-35) as risky consumers, and 31.9% (95% CI: 26-37) as abusive consumers or potential alcoholics (see Table 2).

Table 2. Classification of Alcohol Consumption according to the MAST-G

Types of Alcohol Consumption	f	%	LL	UL
Sensible or low-risk consumption	78	38.2	33	44
Risky consumption	61	29.9	24	35
Abusive consumption or potential alcoholism	65	31.9	26	37

Note: f = Frequency, % = Percentage, n = 204 (participants who have consumed alcohol at any point in their lives), LL = Lower Limit, UL = Upper Limit.

Source: Prepared by the authors.

A significant difference in alcohol consumption types by sex was found ($\chi^2 = 50.71$; $p < 0.001$) (Table 3). Women were found to engage in sensible or low-risk consumption more frequently than men (82.1% vs. 17.9%). Similarly, women predominated in risky consumption (67.2%) compared to men (32.8%). Finally, men reported a higher proportion of abusive consumption or probable alcoholism (75.4%) than women (24.6%).

Table 3. Classification of Alcohol Consumption by Sex according to the MAST-G

Sex		Sensible alcohol consumption	Risky alcohol consumption	Abusive consumption or potential alcoholism	Total
Male	F	14	20	49	83
	%	17.9	32.8	75.4	40.7
Female	f	64	41	16	121
	%	82.1	67.2	24.6	59.3

Note: n (men) = 83, n (women) = 121, statistical test ($\chi^2 = 50.71$; $p < 0.001$)

Source: Prepared by the authors.

Finally, regarding the third objective of the study (see Table 4), negative and significant relationships were found between spirituality and alcohol consumption ($r_s = -0.368$, $p < 0.01$), as well as between religiosity and alcohol consumption ($r_s = -0.473$, $p < 0.01$). These findings suggest that greater spirituality and religiosity are associated with lower alcohol consumption in older adults.

Additionally, negative and significant relationships were found between spirituality ($r_s = -0.258$, $p < 0.01$) and religiosity ($r_s = -0.351$, $p < 0.01$) and the number of alcoholic drinks consumed on a typical day. Positive and significant relationships were also found between spirituality ($r_s = 0.383$, $p < 0.01$) and religiosity ($r_s = 0.438$, $p < 0.01$), with an average age of alcohol consumption onset of 20.32 years ($SD = 6.39$). These results suggest that individuals with higher levels of spirituality and religiosity tend to start drinking alcohol at a later age.

Table 4. Correlation Coefficient of Spirituality, Religiosity, Age of Onset of Alcohol Consumption and Alcohol Consumption on a Typical Day

	Alcohol consumption	Age of onset of alcohol consumption	Alcohol consumption on a typical day
Spirituality	-.368**	.383**	-.258**
	(.001)	(.001)	(.001)
Religiosity	-.473**	.438**	-.351**
	(.001)	(.001)	(.001)

Note: p = (significance found between parentheses), ** = significant correlation less than .01, $n = 204$ (sample of older adults who consume alcohol).

Source: Prepared by the authors.

Discussion

Based on the results obtained in this study, females predominated among the participants, which is consistent with other studies performed in Mexico (36, 29) and Argentina (37). This is a common characteristic of the older adult population in Mexico, where women have a higher life expectancy than men. This could be due to the high mortality rate among young and adult men from causes such as accidents, violence or chronic diseases resulting from unhealthy lifestyles (38). The average age was 67.8 years, differing from the figures reported in studies conducted in the United States (60.4 years) and Norway (74 years). This difference could be explained by the economic level and demographic structure of the countries. Additionally, 56% of the Mexican population ranges between 60 and 69 years of age.

Regarding the educational level, the study population was predominantly older adults with bachelor's degrees, which differs from reports among older adults in India and Peru, where the level of education was mainly elementary and middle school. This difference could be explained by the level of development of the countries in which the studies were performed. In the case of the present study, it was conducted in a border area with the United States, where there may have been greater opportunities for study and employment at an early age, thus allowing greater access to the education system.

In terms of marital status, 64% of older adults were married or living with a partner, which is consistent with reports on older adults in the United States (22). This could be explained by the fact that this generation (known as Baby Boomers) believes that marriage is for life, so they remain committed to their family and spouse until one of them dies. Consequently, divorce and abandonment are uncommon. Furthermore, marriage among older adults is currently perceived as a source of happiness and well-being as it provides companionship and emotional support. Consequently, it is becoming increasingly common for older adults who have lost their first spouses to enter into common-law relationships (42).

In terms of employment status, the majority of older persons were retired, which is consistent with studies conducted in Norway (39) and Cuba (43). This could be explained by the fact that labor regulations in most countries seek to promote decent and productive work opportunities for men and women in safe conditions. Typically, retirement age is between 60 and 70, a period during which older adults' physical and cognitive abilities decline, which could affect their performance and expose them to occupational hazards (44). Additionally, upon reaching these ages, older adults often wish to end their active working lives to pursue unfinished projects, travel, spend time with their families, and care for their grandchildren, spouses, or partners (45).

In terms of religion, the majority of older adults defined themselves as Catholic, which is consistent with studies conducted in Mexico (23, 46) but differs from studies conducted in the United States, where Christianity is predominant (21, 27). This could be explained by the fact that, unlike in the United States and Europe, there has been a recent distancing from Catholicism in Mexico due to immigration from other religious and cultural backgrounds, as well as negative events within the church that have led to mistrust among parishioners. This has led to a greater emphasis being placed on science.

However, religion continues to be relevant in Latin America, both at the individual and social levels. Most of the participants grew up in families where Catholicism was the main religion, which strengthened their religious identity and led them to remain Catholic into old age. Furthermore, religion acts as a conservative force, strengthening values. For example, the majority of the population in Mexico claims to belong to this religion (38, 47).

Regarding alcohol consumption, the average age of onset reported was 20.32 years, consistent with reports from older adults in Monterrey, Mexico (32). This could be because, in previous generations, consuming alcohol at an early age was not socially acceptable. There was more respect for parents, and rules against consuming alcohol were obeyed. There was also less access to alcohol, meaning consumption began after reaching the legal age, which in Mexico is 18 years old. Culturally, people also tended to marry young and take on responsibilities at work and at home, particularly concern-

ing childcare, which reduced their leisure time and the likelihood of consuming alcohol.

Respecting the first objective, which was to describe the prevalence of alcohol consumption, it was reported that 71.3% of people had consumed alcohol at some point in their lives. This was followed by 47.9% who had consumed alcohol in the last year, 33.6% in the last month and 22% in the last week. These figures are consistent with those reported for older adults in Ciudad del Carmen (Campeche, Mexico) and the city of Monterrey, Nuevo León, Mexico. In Ciudad del Carmen, 71.8% of older adults had consumed alcohol at some point in their lives, compared to 45.1% in the last year, 32.2% in the last month, and 27.8% in the last week. In Monterrey, the respective figures were 84.6%, 41%, 26.6%, and 18.8%.

The foregoing prevalence rates could be explained by the fact that older adults have probably been consuming alcohol since their youth. Although there has been a decrease in consumption frequency, this practice continues to be “normal.” This could explain why older adults begin to experience a reduction in body mass, which influences the distribution of alcohol, which causes its effects to be more intense and faster, thereby limiting consumption.

Regarding the second objective, 38.2% of older adults were categorized as sensible or low-risk consumers, 29.9% as risky consumers, and 31.9% as abusive consumers or potential alcoholics. These results differ from those obtained among older adults in Monterrey, Nuevo León, where 91.2% were sensible or low-risk consumers, 6.4% were risky consumers, and 2.4% were harmful consumers (49). These differences could be due to the city’s geographical location on the northern border of Mexico, strongly influenced by US culture, where alcohol consumption among older adults is widely accepted. Furthermore, alcohol is more accessible in this country through various promotional means and at lower prices. Generally, older adults have the financial resources to purchase alcohol and are socially accepted to drink it at home or at social gatherings.

In terms of alcohol consumption patterns, sensible or low-risk consumption was more prevalent among women (82.1%), whereas men exhibited higher rates of risky (32.8%) and abusive (75.4%) consumption, and probable alcoholism. These data are consistent with those obtained from older adults in Nuevo León, Mexico, where 93.8% of women reported sensible or low-risk consumption compared to 33.3% of men who reported higher-risk or abusive consumption, or probable alcoholism. These gender differences could be explained by the fact that, when the participants in this study were young, there was a strong perception that alcohol consumption influenced virility and served to reaffirm masculinity. Consequently, men tended to consume alcohol more frequently and in greater quantities than women.

In contrast, women were expected to display femininity and adopt behaviors associated with Marianism and submission. This included restricting alcohol consumption, as it was perceived negatively, unlike today (50).

The significant negative relationship found between spirituality and alcohol consumption is consistent with reports from older adults in Nuevo León, Mexico (49), the United States (21, 22) and Brazil (51). This may be because the connection with a supreme being at this stage of life provides an acceptance-based framework of meaning and self-reflection that fosters feelings of peace and facilitates coping with the physical and social losses associated with ageing. Additionally, spiritual practices frequently involve support networks that foster feelings of companionship, active listening, and gratitude in older adults, promoting the adoption of behaviors that align with religious moral values, such as abstaining from alcohol (51).

Pursuant to the significant negative relationship reported between religiosity and alcohol consumption, this result is consistent with reports from older adults in Monterrey, Mexico (23) and the United States (52). This could be explained by older adults using their time to regularly attend religious events or worship services, and getting involved in activities organized by their church or congregations. These are spaces where they can establish friendships and support networks, which help them to stay active and prevent the feeling of loneliness. Loneliness has been identified as a factor that can lead to alcohol consumption as a means of escape and coping. Furthermore, in some religions, such as Christianity, alcohol consumption is considered “inappropriate,” prompting older adults to abstain or set limits to prevent affecting their relationship with the divinity and their activities within their congregation or religious group. Moreover, remaining within religious communities provides social support and a sense of belonging, as well as security and role models who set clear boundaries and encourage healthy lifestyles, thereby reducing the likelihood of risky behaviors associated with alcohol consumption.

Conclusion

The results showed that 71.3% of older adults had consumed alcohol at some point in their lives: 47.9% in the last year; 33.6% in the last month; and 22% in the last week. It was seen that older male adults had higher rates of alcohol consumption, abuse and probable alcoholism, which directly affects their physical, psychological and cognitive health. Additionally, a significant negative correlation was found between spirituality and religiosity, and alcohol consumption and the number of drinks consumed on a typical day. Conversely, a positive correlation was seen between spirituality and religiosity, and the age at which alcohol consumption began.

These results could promote research into these variables (spirituality and religiosity), which have received little attention in this population. Further research should be conducted in different lo-

cations to enable comparison of the data with that presented in this article. Additionally, these results could pave the way for incorporating these variables into interventions designed to reduce alcohol consumption among older adults and enhance their physical, psychological, and social well-being.

Conflicts of interest

The authors state they have no conflict of interest.

Referencias

1. Instituto Nacional sobre el Abuso de Drogas (NIDA). El consumo de drogas entre los adultos mayores. 2020. <https://nida.nih.gov/es/publications/el-consumo-de-drogas-entre-los-adultos-mayores>
2. Organización Mundial de la Salud. Envejecimiento activo: Un marco político. Ginebra: OMS. 2022.
3. México. Ley de los Derechos de las Personas Adultas Mayores. Diario Oficial de la Federación, 25 de junio de 2002. Última reforma publicada el 22 de junio de 2018. <https://www.diputados.gob.mx/LeyesBiblio/pdf/LDPAM.pdf>
4. Toapaxi E, Guarate Y, Cusme N. Influencia del estilo de vida en el estado de salud de los adultos mayores. *Enfermería investiga*, 2020;5(4):18-24. DOI: <https://doi.org/10.31243/ei.uta.v5i4.966>. 2020
5. Domínguez-Chávez CJ, Mendoza-Catalán G, Cortez-Rodríguez F, Orendain-Jaime EN, Salazar-González BC. (2023). Conductas del estilo de vida y sarcopenia en personas mayores de Mexicali México: estudio transversal. *Índex de Enfermería*. 2023;32(2). Disponible en: <https://ciberindex.com/index.php/ie/article/view/e14304>
6. Rojas-Zepeda C, López-Espinoza M, Cabezas-Araneda B, Castillo-Fuentes J, Toro-Pedreras S, Vera-Muñoz M. Factores de riesgo sociodemográficos y morbidos asociados a deterioro cognitivo leve en adultos mayores. *Cuadernos de Neuropsicología/Panamerican Journal of Neuropsychology*. 2021;15(2):43-56. Disponible en: <https://www.cnps.cl/index.php/cnps/article/view/464>
7. Brito Y, Urquiza ÁFP, Guarango P AR. Estilos de vidas de los adultos mayores residentes en parroquias rurales del cantón Riobamba. *Revista de Investigación Enlace Universitario*. 2021;20(2):75-87. DOI: <https://doi.org/10.33789/enlace.20.2.98>
8. Ortolá R, Sotos-Prieto M, García-Esquinas E, Galán I, Rodríguez-Artalejo F. Patrones de consumo de alcohol y mortalidad entre adultos mayores con factores de riesgo socioeconómicos o relacionados con la salud. *JAMA Network Open*. 2024;7(8):1-15. DOI: <https://doi.org/10.1001/jamanetworkopen.2024.24495>
9. Observatorio de Salud Mental y Adicciones. Mortalidad relacionada con el consumo de sustancias psicoactivas. Secretaría de Salud. 2024.
10. Substance Abuse and Mental Health Services Administration (SAMHSA). Substance Use and Misuse among Older Adults. 2021. <https://www.samhsa.gov/resources-serving-older-adults/center-resources>
11. Ramírez-Toscano Y, Canto-Osorio F, Carnalla M, Colchero MA, Reynales-Shigematsu LM, Barrientos-Gutiérrez T, et al. Patrones de consumo de alcohol en adolescentes y adultos mexicanos: Ensanut Continua 2022. *Salud Pública de México*. 2023;65(1):1-9. DOI: <https://doi.org/10.21149/14817>
12. Instituto Nacional de Salud Pública. Encuesta Nacional de Consumo de Drogas, Alcohol y Tabaco, ENCODAT 2016-2017. Instituto Nacional de Psiquiatría Ramón de la Fuente Muñiz. 2017. https://encuestas.insp.mx/repositorio/encuestas/ENCODAT2016/doctos/informes/reporte_encodedat_tabaco_2016_2017.pdf
13. Reid S. El alcohol y los adultos mayores. 2024. <https://www.helpguide.org/es/problemas-del-envejecimiento/el-alcohol-ylos-adultos-mayores>
14. White A, Orosz A, Powell P, Koob G. Alcohol and Aging. An Area of Increasing Concern. *Alcohol*. 2022;107:19-27. DOI: <http://doi.org/10.1016/j.alcohol.2022.07.005>
15. Salazar Moreno CA, Alonso Castillo MM, Armendáriz García NA, Rodríguez Puente LA. Eventos estresantes de la vida y consumo de alcohol en adultos mayores. *Horizonte sanitario*. 2023;22(1):97-106. Disponible en: <https://revistahorizonte.ujat.mx/horizonte/es/article/view/4986>
16. Chagas C, Martins LB, Bezerra AG, Paula TCSD, Xavier ACA, Zangari W, Galduroz JCF. (2023). A Systematic Review on Alcohol Consumption among Non-Religious and Religious Adults. *Substance Use & Misuse*. 2023;58(2):238-256. DOI: <https://doi.org/10.1080/10826084.2022.2155477>
17. Bós, A. J., y Gallagher, A. Spirituality and Religiosity in Brazilian and American Older Adults, Characteristics and Nursing Care Approach. *Innovation in Aging*. 2023;7(1):279. DOI: <https://doi.org/10.1093/geroni/igad104.0928>
18. Reed, P.G. Developmental Resources and Depression in the Elderly. *Nursing Research*. 1986;35(6):368-374. DOI: <https://doi.org/10.1097/00006199-198611000-00014>
19. Garassini ME. Psicología positiva y comunicación no violenta. Editorial Manual Moderno. 2022.
20. Zadworna M, Stetkiewicz-Lewandowicz A. The Relationships between Wisdom, Positive Orientation and Health-Related Behavior in Older Adults. *Scientific Reports*. 2023;13(1):16724. DOI: <https://doi.org/10.1038/s41598-023-43868-3>
21. Kelly JF, Eddie D. (2020). The Role of Spirituality and Religiosity in Aiding Recovery from Alcohol and Other Drug Problems: An Investigation in a National US Sample. *Psychology of Religion and Spirituality*. 2020;12(1):1-16. DOI: <http://doi.org/10.1037/rel0000295>
22. McClure PK, Wilkinson LR. (2020). Attending Substance Abuse Groups and Identifying as Spiritual but Not Religious. *Review of Religious Research*. 2020;62(2):197-218. DOI: <https://doi.org/10.1007/s13644-020-00405-2>

23. Salazar CAS, Castillo MMA, da Silva Gherardi-Donato EC, García NA A. Perspectiva espiritual, religiosidad y consumo de alcohol en adultos mayores. *Journal Health NPEPS*. 2019; 4(2):151-166. DOI: <https://doi.org/10.30681/252610103688>
24. Morello G, Rabbia HH, Da Costa N, Romero C. La religión como experiencia cotidiana: creencias, prácticas y narrativas espirituales en Sudamérica. Editorial Universidad Católica de Córdoba; 2023.
25. Olarte NR, Ramírez JEB. Contribuciones y efectos positivos de la religión y la espiritualidad en la salud. En *¿Cuál es el aporte del sector religioso a la sociedad?* 1ed; 2024. p.73-116.
26. Vandembroucke JP, Von Elm E, Altman DG, Gøtzsche PC, Mulrow CD, Pocock SJ, et al. Strengthening the Reporting of Observational Studies in Epidemiology (STROBE): Explanation and Elaboration. *Anales de Medicina Interna*. 2007;147:163W-94W. DOI: <https://doi.org/10.7326/0003-4819-147-8-200710160-00010-w1>
27. Martínez J, Dueñas R, Onís MC, Aguado C, Albert C, Luquec R. Adaptación y validación al castellano del cuestionario de Pfeiffer (SPMSQ) para detectar la existencia de deterioro cognitivo en personas mayores de 65 años. *Medicina Clínica*, 2001;117(4):129-134. DOI: [https://doi.org/10.1016/S0025-7753\(01\)72040-4](https://doi.org/10.1016/S0025-7753(01)72040-4)
28. Castañeda-Flores T, Guerrero-Castañeda RF. Espiritualidad en adultos mayores hospitalizados, oportunidad de cuidado para enfermería: aproximación cuantitativa. *Revista Cuidarte*, 2019;10(3):1-11. DOI: <https://doi.org/10.15649/cuidarte.v10i3.724>
29. Salazar-Moreno CA, Alonso-Castillo MM, Guzmán-Facundo FR, López-García KS. Sentido de Coherencia asociado con los Eventos Estresantes de la Vida en adultos mayores. *Enfermería universitaria*. 2020;17(3):262-272. DOI: <https://doi.org/10.22201/eneo.23958421e.2020.3.853>
30. Koenig HG, Büsasing A. The Duke University Religion Index (DUREL): A five-item measure for use in epidemiological studies. *Religions*, 2010;1(1):78-85. DOI: <https://doi.org/10.3390/rel1010078>
31. Taylor PW. Psychometric Properties of the Duke University Religion Index English and Spanish Versions for Hispanic American Women (Tesis doctoral). San Diego: State University; 2013.
32. Da Silva JV, Dias BVB. Avaliação das propriedades psicométricas da versão em português da escala de Religiosidade da Duke (P-DUREL). *REME-Revista Mineira de Enfermagem*. 2017;21(1). DOI: <https://doi.org/10.5935/1415-2762.20170022>
33. Blow FC, Brower KJ, Schulenberg JE, Demo-Dananberg LM, Young JP, Beresford TP. The Michigan alcoholism screening test-geriatric version (MAST-G): a new elderly-specific screening instrument. *Alcoholism. Clinical and Experimental Research*. 1992;16(2):372.
34. Alonso Castillo B, Palucci Marzlale M, Alonso Castillo M, Guzmán Facundo F, Gómez Meza M. Situaciones de la vida estresantes, uso y abuso de alcohol y drogas en adultos mayores de Monterrey, México. *Rev. Latino-am Enfermagem*. 2008;16.
35. Secretaría de Salud. Ley General de Salud en Materia de Investigación en Salud. México, D.F.; 2016.
36. Álvarez-Aguirre A, Casique-Casique L, López-Nolasco B, Tolentino-Ferrel MDR. Efecto de una intervención de enfermería para la disminución del consumo de alcohol de riesgo en adultos mayores. *Sanus*. 2021;6. DOI: <https://doi.org/10.36789/sanus.vi1.195>
37. Vera A, Olivera M, Prozzillo P, Simkin H. Espiritualidad, religiosidad y personalidad como predictores del florecimiento. *Revista Psicodébate: Psicología, Cultura y Sociedad*. 2023;23(2):62-71. DOI: <https://dx.doi.org/10.18682/pd.v23i2.9230>
38. Instituto Nacional de Estadística y Geografía. Encuesta Nacional de la Dinámica Geográfica (ENADID). 2023;305(24):1-48. https://www.inegi.org.mx/contenidos/programas/enadid/2023/doc/resultados_version_amplia_enadid23.pdf
39. Tevik K, Skrastad RB, Benth JS, Selbæk G, Bergh S, Eldholm RS, Helvik AS. Prevalence and Change in Alcohol Consumption in Older Adults over Time, Assessed with Self-Report and Phosphatidylethanol 16: 0/18: 1—The HUNT Study. *PLOS ONE*. 2024;19(5):1-27. DOI: <https://doi.org/10.1371/journal.pone.0304714>
40. Roopani R, Dumka N, Kotwal A. Factors Influencing Life Satisfaction and Discrimination among the Elderly in India. *Revista India de Salud Pública*. 2022;(66):362-366. DOI: https://doi.org/10.4103/ijph.ijph_2152_21
41. Torres Mantilla JC, Torres Mantilla JD. (2023). Factores asociados al trastorno depresivo en adultos mayores peruanos. *Horizonte Médico (Lima)*. 2023;23(3). DOI: <https://doi.org/10.24265/horizmed.2023.v23n3.05>
42. Martin G, Roberts S. Exploring legacies of the baby boomers in the twenty-first century. *The Sociological Review*. 2021;69(4): 727-742. DOI: <https://doi.org/10.1177/00380261211006326>
43. León-Machín E, Prado Rodríguez RF, Corona Miranda B, Romero Carrazana R. Caracterización de pacientes con trastornos adictivos y por uso de sustancias. *Arch. Hosp. Univ. "Gen. Calixto García"*, 2021;9(2):190-205. <https://revcalixto.sld.cu/index.php/ahcg/article/view/e678/634>
44. Pangol Lascano AM. Rol de las normas internacionales del trabajo en el derecho laboral de un mundo globalizado. *Revista Universidad y Sociedad*. 2021;13(1):276-282. http://scielo.sld.cu/scielo.php?pid=S2218-36202021000100276&script=sci_arttext
45. Smith Maguiña CA. Programa psicoeducativo integrador para la adaptación a la jubilación en docentes de la Universidad Nacional Pedro Ruiz Gallo al 2021. Tesis doctoral. Universidad Nacional Pedro Ruiz Gallo; 2023.
46. González-Cantero JO, Hernández-Magaña CE, González-Becerra VH, Abundis-Gutiérrez A. Locus de control de la salud, actitud religiosa y espiritualidad en adultos mayores. *Archivos de Medicina*. 2021;21(2):446-456. DOI: <https://doi.org/10.30554/archmed.21.2.4012.2021>
47. Morello G. Una modernidad encantada. Religión vivida en Latinoamérica. Editorial Universidad Católica de Córdoba; 2021.
48. Telumbre-Terrero JY, Maas-Góngora L, Castillo-Arcos LDC, Noh-Moo PM, Peralta-Barrientos JDF. Autotrascendencia y patrón del consumo de alcohol o tabaco en personas adultas con diabetes mellitus tipo 2. *Index de Enfermería*. 2024;33(4). DOI: <https://dx.doi.org/10.58807/indexenferm20246902>
49. Alonso Castillo MM, Salazar Moreno C A, Armendáriz García NA, López García KS. Autotrascendencia y su efecto en el bienestar físico, psicológico y social en adultos mayores. *Nure Investigación*. 2024;(132). DOI: <https://doi.org/10.58722/nure.v21i132.2506>
50. Cáceres D, Cáceres C, Colimil F, Ramírez D. Análisis interdisciplinar con perspectiva de género del alcoholismo en mujeres. *Revista cubana de medicina general integral*. 2020;36(1):1-13. DOI: <http://doi.org/10.20882/adicciones.1195>
51. Vitorino LM, Tostes JG, Ferreira JCL, de Oliveira L AG, Possetti JG, Silva Jr MT., Lucchetti G. Association between Religiosity/Spirituality and Substance Use among Homeless Individuals. *International Journal of Social Psychiatry*. 2023. DOI: <https://doi.org/10.1177/00207640231211495>
52. Pomerleau JM, Pargament KI, Krause N, Ironson G, Hill P. Religious and Spiritual Struggles as a Mediator of the Link between Stressful Life Events and Psychological Adjustment in a Nationwide Sample. *Psychology of Religion and Spirituality*. 2020;12(4):451. DOI: <https://doi.org/10.1037/relo000268>