

## **PREVALENCE AND FACTORS ASSOCIATED WITH ABUSE AND LIKELY DEPENDENCE OF ALCOHOL AMONG ELDERLY**

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### **ABSTRACT**

**Objective:** verify the prevalence of abuse and probable alcohol dependence in the elderly; describe sociodemographic and clinical characteristics of the elderly; and verify the factors associated with alcohol abuse and probable dependence in the elderly.

**Method:** cross-sectional study, observational, domiciliary survey type, conducted with 614 elderly people living in the urban area of the city of Uberaba, Brazil. The Mini Mental State Examination, sociodemographic instrument, Older Americans Resources and Services Questionnaire, Geriatric Depression Scale and Michigan Alcoholism Screening Test – Geriatric Version were used. Statistical analysis was performed in the Statistical Package for Social Sciences.

**Results:** the prevalence of abuse and probable alcohol dependence was 26.5%. Among the elderly with abuse and probable dependence on alcohol, there was predominance of males, 60 |- 70 years old, who lived with a spouse or partner, had 1 |- 5 years of schooling, individual monthly income from 1 |- 3 minimum wages, five or more morbidities and no indication of depressive symptoms. Abuse and probable alcohol dependence were associated with males and the presence of depressive symptoms.

**Conclusion:** the study reinforces the need to identify early abuse and probable alcohol dependence in the elderly and to invest in health action strategies for the purpose of health promotion, disease prevention and rehabilitation of the elderly.

**DESCRIPTORS:** Elderly. Alcoholism. Alcohol use. Prevalence. Geriatric Nursing.

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## PREVALÊNCIA E FATORES ASSOCIADOS AO ABUSO E PROVÁVEL DEPENDÊNCIA DE ÁLCOOL ENTRE IDOSOS

### RESUMO

**Objetivo:** verificar a prevalência do abuso e provável dependência do álcool em idosos; descrever as características sociodemográficas e clínicas e dos idosos; e verificar os fatores associados ao abuso e provável dependência do álcool em idosos.

**Método:** estudo transversal, observacional do tipo inquérito domiciliar, realizado com 614 idosos residentes na zona urbana do município de Uberaba, Brasil. Foram utilizados o Mini Exame de Estado Mental, instrumento sociodemográfico, Questionário *Older Americans Resources and Services*, Escala de Depressão Geriátrica Abreviada e *Michigan Alcoholism Screening Test – Geriatric Version*. Realizou-se análise estatística no *Statistical Package for Social Sciences*.

**Resultados:** a prevalência do abuso e provável dependência do álcool foi de 26,5%. Entre os idosos com abuso e provável dependência de álcool verificou-se predomínio do sexo masculino, 60 |- 70 anos, moravam com esposo(a) ou companheiro(a), tinham 1 |- 5 anos de escolaridade, renda mensal individual de 1 |- 3 salários mínimos, cinco ou mais morbidades e ausência de indicativo de sintomas depressivos. O abuso e provável dependência do álcool foram associados ao sexo masculino e a presença de indicativo de sintomas depressivos.

**Conclusão:** o estudo reforça a necessidade de identificar precocemente o abuso e provável dependência do álcool em idosos e investir em estratégias de ações de saúde com a finalidade de promoção a saúde, a prevenção de doença e reabilitação do idoso.

**DESCRITORES:** Idoso. Alcoolismo. Uso de álcool. Prevalência. Enfermagem geriátrica.

## PREVALENCIA Y FACTORES ASOCIADOS AL EXCESO Y PROBABLE DEPENDENCIA DE ALCOHOL ENTRE ANCIANOS

### RESUMEN

**Objetivo:** comprobar la prevalencia del exceso y probable dependencia de alcohol en ancianos; describir las características sociodemográficas y clínicas de los ancianos, y verificar los factores asociados al exceso y probable dependencia de alcohol en ancianos.

**Método:** estudio transversal, observacional, tipo encuesta domiciliaria, realizado con 614 ancianos residentes en la zona urbana del municipio de Uberaba, Brasil. Se utilizaron el Mini Examen de Estado Mental, el instrumento sociodemográfico, la encuesta *Older Americans Resources and Services*, la Escala Abreviada de Depresión Geriátrica y el *Michigan Alcoholism Screening Test – Geriatric Version*. El análisis estadístico se llevó a cabo en el *Statistical Package for Social Sciences*.

**Resultados:** la prevalencia del exceso y probable dependencia del alcohol fue de 26,5%. Entre los ancianos con exceso y probable dependencia de alcohol se pudo comprobar un predominio del sexo masculino, entre 60 |- 70 años, vivían con su esposo(a) o compañero(a), tenían de 1 |- 5 años de estudios, ingreso mensual individual de 1 |- 3 salarios mínimos, cinco o más morbilidades y ausencia de síntomas indicadores depresivos. El exceso y probable dependencia de alcohol se asoció al sexo masculino y a la presencia de síntomas indicadores de depresión.

**Conclusión:** el estudio refuerza la necesidad de identificar precozmente el exceso y probable dependencia de alcohol en ancianos, e invertir en estrategias de acciones de salud con la finalidad de promover salud, prevenir enfermedades y rehabilitar al anciano.

**DESCRIPTORES:** Anciano. Alcoholismo. Uso de alcohol. Prevalencia. Enfermería geriátrica.

## INTRODUCTION

The population aging is occurring rapidly in the world, it is estimated that the number of elderly people will quadruple by 2060 and the life of this population will exceed 80 years. This phenomenon will particularly affect developing countries, which is the case of Brazil, since the demographic transition first appeared in the developed countries and, therefore, they had a longer period to prepare.<sup>1</sup> Despite the accelerated growth of the elderly population, aging issues related to health still need to be deepened, among them the alcoholism can be highlighted.<sup>2</sup>

Alcoholism is a chronic disease,<sup>3</sup> characterized by dependence on alcoholic substance which tends to worsen over the years;<sup>4</sup> causing the compulsion to periodic consumption of alcohol and cases of frequent intoxication, leading to serious and irreversible bio-psychosocial consequences,<sup>4</sup> significant behavioral changes<sup>3-4</sup> and in more severe cases to death.<sup>4</sup>

The exacerbated consumption of alcoholic substance is usually considered a health problem that usually affects people in adulthood, however, estimates indicate that the use of alcoholic beverages among the elderly is increasing every day, and its consumption contributes substantially to morbidities, mortality and hospitalizations.<sup>5</sup>

Different prevalence levels of abuse and probable dependence on alcohol are observed in national and international investigations. A study in 143 Brazilian municipalities found that among alcohol users, 12% were compulsive drinkers, 10.4% had subliminal dependence, and 2.9% were alcoholics.<sup>6</sup> Survey conducted with 111 elderly, residents in the urban area of São Carlos (Brazil), found that 22% of the interviewees reported abusive consumption and probable dependence on alcohol.<sup>7</sup> In Finland, research carried out with 300 elderly people from the community of Kuopio identified that 9.7% of the interviewees had alcohol abuse.<sup>8</sup>

From the above-mentioned studies, different methodologies and alcohol abuse classification are observed, despite the peculiarities, the findings demonstrate the relevance of abuse and probable dependence on alcohol in the national and international scenario. It is highlighted that there is a difficulty in measuring the use and abuse of alcohol in this population group since such surveys often have different definitions and concepts, consumption patterns, diagnostic criteria, as well as numerous screening instruments for different age groups.<sup>7</sup> The present study used a specific instrument for screening the use of alcohol in the elderly population, the *Michigan Alcoholism Screening Test – Geriatric Version* (MAST-G), constituting one of the few national studies that made use of specific instruments for this age group.<sup>7</sup> Thus, the information collected by this instrument may represent more reliably the context and the characteristics of alcohol consumption among the elderly that composed the sample.

In view of these numbers, the problem of abusive and chronic use of alcohol in the elderly has been worrying researchers, as well as health professionals, in relation to more effective procedures to obtain more efficient results for the elderly under these conditions.<sup>9</sup>

Alcohol abuse consumption predisposes older people to greater vulnerability risks to the development of physical, psychological and social problems,<sup>10</sup> which many times are not detected by professionals in the different health services.<sup>7</sup> Thus, estimates of current alcohol consumption in the elderly population are varied, but their effects in this stage of life, in addition to the seriousness of the problems, have had a major impact on health care.<sup>7</sup>

Assistance to this clientele is extremely important, since current information on alcohol use in the elderly is scarce and discrimination in caring for the alcoholic patient ends up in some way hindering the act of caring; in this way, health actions are compromised, making it impossible the provision of qualified care.<sup>11</sup>

Knowledge about alcohol abuse in the elderly, as well as the factors associated with it, are essential for the creation of action strategies, since such interventions can help reduce hospitalizations and the number of medications used.

This study aimed to verify the prevalence of abuse and probable dependence on alcohol in the elderly; to describe sociodemographic and clinical and elderly characteristics; and to verify the factors associated with alcohol dependence and abuse in the elderly.

## METHOD

The present investigation is a cross-sectional and observational study, domiciliary survey type. It is part of a larger project that was developed in the urban area of Uberaba city, Brazil. The data were collected from March to July 2016.

The number of individuals in the sample was established by statistical calculation using cluster sampling. The population sample was calculated considering a prevalence of abuse and probable alcohol dependence of 37.5%,<sup>7,12-13</sup> with a precision of 4% and a 95% confidence interval, for a total population of 36,703 elderly residents in the urban area of Uberaba,<sup>1</sup> it was reached a sample of 769 elderly. Calculating a loss of 20% sampling, the maximum number of interviews was 855.

For the selection of the elderly, the arbitrary draw of 50% of the census tracts of the municipality was considered in the first stage through systematic sampling, and a unique list of the sectors was organized. The sampling interval (IA) was calculated using the formula:  $IA = Ncs/ncs$ ; where Ncs is the total number of census sectors and ncs the number of census sectors drawn (approximately two). The first census sector was randomly selected and the others were according to IA; the listing of the sectors was ordered in ascending numerical order, for the purpose of raffle.

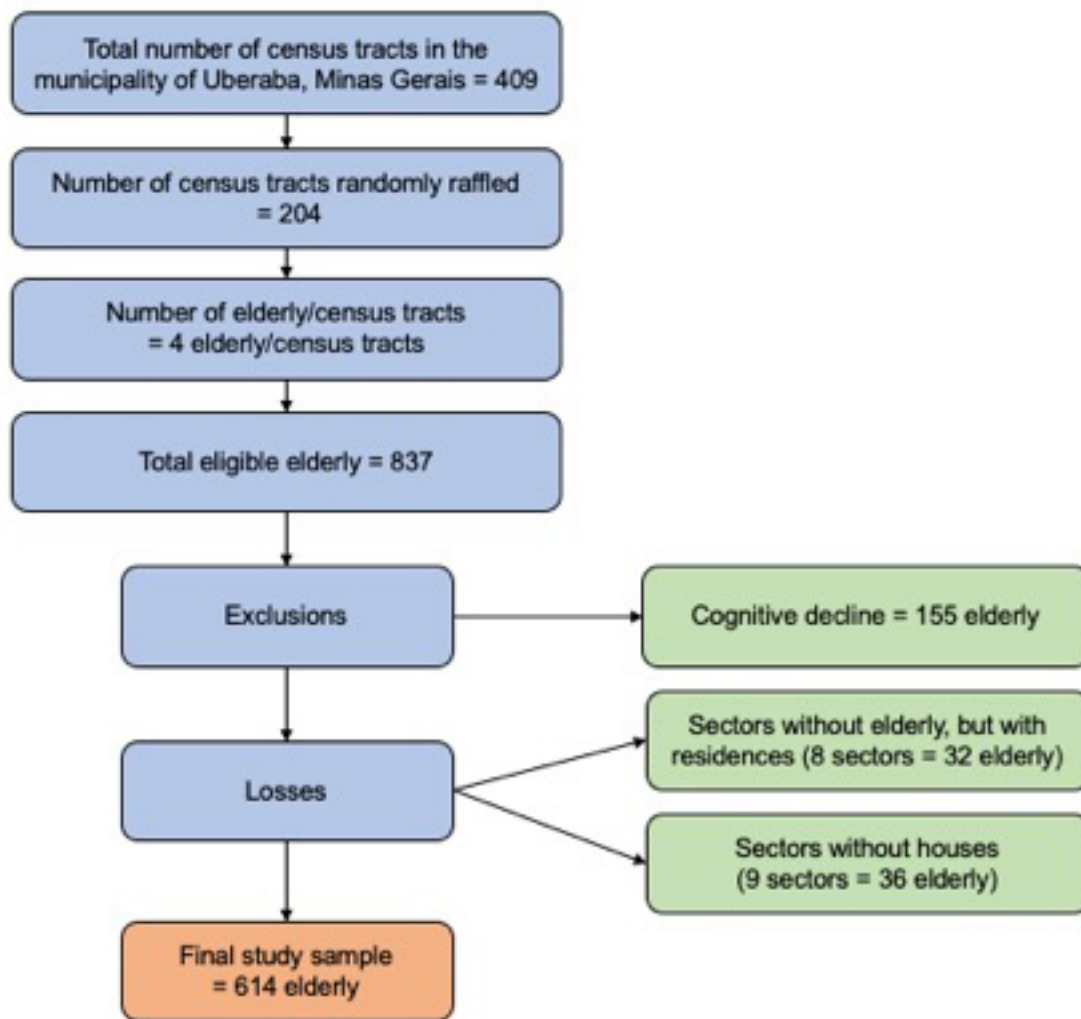
In the second stage, the number of elderly people to be interviewed, according to the sample calculation (769), was divided by the number of census tracts in the municipality (204), obtaining an approximately similar value within each census sector. The number of households/elderly in Uberaba was 3.76 elderly, being rounded up to four elderly by census sector. As a result, the number of interviews was of 837 elderly.

The inclusion criteria were: to be 60 years old or older and to reside in the urban area of the city of Uberaba. The elderly who were not located after three attempts by the interviewer and cognitive decline (n=155 elderly) were excluded; the losses were: sectors without elderly (eight sectors n=32 elderly) and sectors without houses (nine sectors n=36 elderly). Thus, 614 elderly were interviewed, Figure 1.

### Study protocol

For the correct filling of the instruments, a specific training was carried out for the interviewers (composed of 13 students: three nursing students, one medical student, six master's students and three doctoral students of the *Stricto Sensu* Post Graduate Program in Health Care) on the correct way to approach the interviewee and annotation of the intercurrents (absences, refusals and others) in field worksheet. In addition, systematic meetings were held between the researcher, supervisors (consisting of three professors of the *Stricto Sensu* Post Graduate Program in Health Care and four doctoral students of the program) and interviewers; supervision was performed to follow the correct filling and quality control, in addition to possible doubts regarding the collection.

The Mini Mental State Examination (MMSE) was used for cognitive evaluation, translated and validated in Brazil.<sup>14</sup> The MMSE scores range from 0 to 30 points; the cutoff point for cognitive decline considers the level of schooling of the respondent, corresponding to 13 points for illiterates, 18 points or less for 1 to 11 years of schooling and 26 points for schooling over 11 years.<sup>14</sup>



**Figure 1** - Final composition of the sample

The sociodemographic data characterization was performed using the instrument elaborated by the Collective Health Research Group of the *Universidade Federal do Triângulo Mineiro-UFTM*, composed of five items: gender, age, marital status, education and individual income in minimum wages; being this instrument tested and used by the research group for eight years.

Self-reported morbidities were extracted from the Older Americans Resources and Services (OARS) Questionnaire, composed of 26 components in which it is considered whether or not the elderly present certain diseases and if it is confirmed whether or not they interfere in everyday life.<sup>15</sup>

The Abbreviated Geriatric Depression Scale (GDS-15) was used to screen for indications of depressive symptoms in the elderly, elaborated and validated in Brazil,<sup>16</sup> being composed of 15 closed questions with objective answers (yes or no), with a score that can alternate from 0 to 15 points, being considered indicative of depressive symptoms when the score is greater than five points.<sup>16</sup>

The abuse and probable dependence of alcohol in the elderly was evaluated by means of MAST-G, which is an instrument adapted and validated for the Brazilian reality,<sup>7</sup> and presents 24 questions and its sensitivity to the cut-off value is five positive responses. A score between 0 to 4 points means that there is no evidence of alcoholism, while the sum equal to or above five points characterizes problems related to abuse and probable dependence on alcohol.<sup>7</sup>

The variables of the study were: sociodemographic characteristics: gender (male and female), age group, in years (60 |- 70; 70 |- 80; 80 or more years), marital status (never married or lived with partner, lives with spouse or partner, widowed, separated, divorced), schooling, in years of study (no

schooling; 1 |- 5; 5|- 9, 9 or more), individual income, in minimum wages (without income; <1; 1; 1|- 3; 3|- 5;> 5); self-reported morbidities: none; 1|- 5; 5 or more); indicative of depressive symptoms: yes, no; and abuse and probable dependence on alcohol: yes, no.

## Analysis of results and statistics

In order to analyze the data, an electronic database was created, in the Excel® program, in double entry, proceeding to the consistency of the fields. When there were inconsistent data, they were verified in the original interview, and performed their correction. This data was transferred to the software Statistical Package for Social Sciences (SPSS), version 21.0 for analysis.

The prevalence rate was calculated according to the formula:

$$\text{Prevalence coefficient} = \frac{\text{number of cases of a particular disease in a given place and period} \times 10^n}{\text{Population of the same place and period}}$$

Data were submitted to descriptive analysis, using absolute and relative frequencies for categorical variables. The bivariate analysis included measures of gross associations in contingency tables, using chi-square tests, prevalence ratio and odds ratio. The binomial logistic regression ( $p \leq 0,05$ ) was used to verify the factors associated with the occurrence or non-occurrence of abuse and probable alcohol dependence.

After the consent of the interviewee and the signing of the Free and Informed Consent Term, the interview was conducted.

## RESULTS

Of the total number of elderly respondents (614), it is observed that 73% (n=448) of the elderly reported not using any type of alcoholic beverage and 27% (n=166) reported using alcohol regularly and/or had ceased drinking in the last year. It was identified the prevalence of abuse and probable alcohol dependence in 26.5% (n=44) of the elderly.

Among the elderly with abuse and probable dependence on alcohol (n=44), the majority were male (77.3%); from 60 to 70 years old (54.5%); lived with spouse or partner (47.7%); had 1 to 5 years of schooling (54.5%) and individual monthly income between 1 to 3 minimum wages (52.3%). Both the elderly with alcohol abuse and probable alcohol dependence and those who did not have alcohol abuse or dependence presented higher percentages for five or more morbidities (68.2% and 62.5%). In both groups, the absence of an indication of depressive symptoms prevailed. Despite this, it should be noted that the elderly with alcohol abuse and probable dependence had a higher percentage of depressive symptoms (36.4%) than those who did not have such dependence (26.1%) (Table 1).

**Table 1** - Frequency distribution of sociodemographic and clinical variables of the elderly, Uberaba, MG, Brazil, 2016

Variables	With abuse and probable dependence on alcohol (n=44)		No abuse nor probable dependence on alcohol (n=570)	
	n	%	n	%
Gender				
Male	34	77.3	163	28.6
Female	10	22.7	407	71.4
Age group (in years)				
60  - 70	24	54.5	245	43.0
70  - 80	15	34.1	225	39.5
80 or more	5	11.4	100	17.5
Marital status				
Never married nor lived with a partner	5	11.4	40	7.0
Lives with spouse or partner	21	47.7	265	46.5
Widower/widow	12	27.3	208	36.5
Separated, divorced	6	13.6	57	10.0
Schooling (in years)				
No schooling	4	9.2	89	15.6
1  - 5	24	54.5	298	52.3
5  - 9	6	13.6	90	15.8
9 or more	10	22.7	93	16.3
Income (in minimum wages)				
No income	2	4.5	53	9.3
< 1 minimum wage	2	4.5	8	1.3
1 minimum wage	11	25.0	254	44.6
1  - 3 minimum wages	23	52.3	205	36.0
3  - 5 minimum wages	5	11.4	32	5.6
> 5 minimum wages	1	2.3	18	3.2
Number of self-reported morbidities				
None	1	2.3	11	1.9
1  - 5	13	29.5	203	35.6
5 or more	30	68.2	356	62.5
Indicative of depressive symptoms				
Yes	16	36.4	149	26.1
No	28	63.6	421	73.9

After applying the screening instrument for abuse and probable alcohol dependence, of the 166 elderly people who consumed alcoholic beverages, 44 have abused and were probably dependent on alcohol, and 122 did not reach the instrument's score for abuse and probable dependence on the substance.

To analyze the associated factors, the variables studied were dichotomized. Thus, in the bivariate analysis, it was verified that male elderly were four times more likely to present abuse and probable alcohol dependence ( $p=0.001$ ). There were no significant differences between groups in the

following variables: age group ( $p=0.577$ ), schooling ( $p=0.663$ ), income ( $p=0.323$ ) and marital status ( $p=0.314$ ). The elderly with indicative of depressive symptoms were three times more likely to present abuse and probable alcohol dependence ( $p=0.004$ ). There was no significant difference between the groups for the number of self-reported morbidities variable ( $p=0.284$ ), (Table 2).

**Table 2** - Distribution of the sociodemographic and clinical variables of the elderly according to the abuse and probable dependence of alcohol, Uberaba, Minas Gerais, Brazil, 2016

Variables	Abuse and probable dependence on alcohol				PR*(CI)†	CPR‡(CI)	p§
	Yes (n=44)		No (n=122)				
	n	%	n	%			
Gender							
Male	34	37.8	56	62.2	2.87 (1.52-5.42)	4.00 (1.81-8.82)	<b>0.001</b>
Female	10	13.2	66	86.8			
Age Group							
60 to 80 years old	39	27.3	104	72.7	1.25 (0.55-2.84)	1.35 (0.46-3.88)	0.577
80 or more	5	21.7	18	78.3			
Schooling							
With schooling	40	27.0	108	73.0	1.21 (0.49-3.0)	1.29 (0.40-4.17)	0.663
No schooling	4	22.2	14	77.8			
Income							
> 1 minimum wage	29	29.3	70	70.7	1.30 (0.76-2.24)	1.43 (0.70-2.94)	0.323
≤ 1 minimum wage	15	22.4	52	77.6			
Marital status							
No partner	23	30.3	53	69.7	1.29 (0.78-2.15)	1.42 (0.71-2.84)	0.314
Has a partner	21	23.3	69	76.7			
Number of self-reported morbidities							
0   5	14	21.9	50	78.1	1.34 (0.77-2.33)	1.48 (0.71-3.08)	0.284
5 or more	30	29.4	72	70.6			
Indicative of depressive symptoms							
Yes	16	45.7	19	54.3	2.13 (1.31-3.48)	3.09 (1.41-6.79)	<b>0.004</b>
No	28	21.4	103	78.6			

\*Prevalence ratio; † Confidence interval; ‡: *Odds Ratio*; § $p < 0.05$ .

To verify the factors associated with alcohol abuse and probable dependence among the elderly, the following variables were considered as predictors of this event: gender, marital status, schooling, number of self-reported morbidities and indicative of depressive symptoms. These were defined based on scientific literature.

They were consolidated as factors associated with alcohol abuse and probable dependence in the elderly: male gender ( $p=0.001$ ) and to have indicative of depressive symptoms ( $p=0.023$ ). It was found that the male elderly have six times greater risk of abuse and probable alcohol dependence (CPR=6.67;  $p=0.001$ ); and those with an indicative of depressive symptoms are twice as likely to be abusive and inclined to be dependent on alcohol (CPR=2.74;  $p=0.023$ ) (Table 3).



**Table 3** - Final multiple binomial logistic regression model for variables associated with alcohol dependence and abuse in the elderly, Uberaba, MG, Brazil, 2016

Variables		RCP*	(CI)†	p‡
Gender	Male	6.67	(2.62-16.96)	<b>0.001</b>
	Female			
Marital status	No partner	2.10	(0.93-4.74)	0.074
	Has a partner			
Schooling	With schooling	2.00	(0.55-7.28)	0.290
	No schooling			
Number of self-reported morbidities	0  - 5 diseases			
	5 diseases or more	2.28	(0.97-5.35)	0.058
Indicative of depressive symptoms	Yes	2.74	(1.15-6.55)	<b>0.023</b>
	No			

\*RCP: *Odds Ratio*; †CI: Confidence interval; ‡p <0.05.

## DISCUSSION

The prevalence of abuse and probable dependence on alcohol obtained in the present study was similar (26.8%) in a national survey conducted with 819 elderly in the community, participants of a longitudinal study based on data from the SABE Study (Health, Welfare and Aging), in the city of São Paulo, Brazil.<sup>12</sup>

Lower prevalence was found in a study with elderly people living in the urban area of São Carlos, Brazil (22%)<sup>7</sup> in a longitudinal survey conducted with non-institutionalized elderly people in the city of São Paulo, Brazil (20.9%);<sup>17</sup> and in an international research conducted with elderly in the community of Kuopio, Finland (9.7%)<sup>8</sup>.

On the other hand, a higher prevalence was obtained in an inquiry with 1,432 elderly people living in the urban area of the city of Campinas, Brazil (29.7%)<sup>13</sup> and in an international study with 210 elderly people enrolled in the Family Health Strategy (ESF) of the Minho region of Portugal (32.9%).<sup>18</sup>

One strategy for the identification of alcohol abuse among the elderly is the home visit performed in primary care. Home care contributes to the understanding of the social space of the elderly and their families and the main difficulties experienced, increasing the possibilities of health professionals and establishing partnerships for the provision of care,<sup>19</sup> being able to intervene in the environment through the promotion of dynamic family changes, referrals to other professionals and continuous monitoring.

Thus, it is fundamental at all care levels the interaction between the multiprofessional health team, with the purpose of identifying the elderly with a previous history of alcoholism, as well as those with potential risks for its occurrence.

Regarding gender, as in the present study, the elderly men presented the highest percentage of abuse and probable alcohol dependence in national and international studies performed<sup>18,21</sup> with non-institutionalized elderly people.<sup>17,20</sup>

An important reason for this result is the fact that there are more women in health services than men. Women make gynecological follow-ups periodically, track neoplasias and still have the task of accompanying children in these services. Therefore, visits to health services represent opportunities for early diagnosis of several diseases still in asymptomatic stages.<sup>22</sup> In view of this, the elderly, especially men, should be clarified about the harmful effects of alcohol use in this age group and established preventive actions and healthy habits.

Regarding the age group, as well as in the present investigation, the prevalence of the elderly among 60 |- 70 years old was also obtained among participants of a longitudinal study based on

data from the SABE Study, in the city of São Paulo, Brazil (83.4%);<sup>12</sup> In a cross-sectional study with prospective data collection performed with elderly individuals in Porto Alegre, Brazil (62.5%);<sup>23</sup> and in a retrospective epidemiological study conducted in the Center of Psychosocial Care (Centro de Atenção Psicossocial - CAPS) in the city of Divinópolis, Minas Gerais, Brazil (56.5%).<sup>24</sup>

In terms of marital status, the findings in national literature with non-institutionalized elderly<sup>7,12</sup> and international studies,<sup>25</sup> corroborates with the results of this study, which obtained a higher percentage of elderly married with abuse and probable dependence on alcohol. A probable explanation for the prevalence of married elderly people is not exclusively associated with the marriage bond, but also with the factors associated with it, such as the economic situation, which may lead in difficult times to a disorder in family cohabitation and in the relationship with the spouse and children;<sup>25</sup> thus, alcohol serves as a “gateway” for such problems.

Considering schooling, data from a survey carried out in the community of the city of Rio Grande do Sul (Brazil) showed a higher percentage of elderly people with abuse and probable alcohol dependence with schooling from 1 |- 5 years of study (66%),<sup>26</sup> matching the findings of the present survey. A divergent result with higher schooling was found in a national survey conducted with the same population<sup>17</sup> and in a international survey.<sup>25</sup> On the other hand, a national study with elderly from the community<sup>27</sup> obtained lower level of schooling than the present study.

The low level of schooling among the elderly is a response from the social structure in which they are inserted, influencing life habits and access to information and preventive health services,<sup>28-29</sup> being able to impact on a worse understanding of health and quality of life.<sup>29</sup>

The percentage of individual monthly income between 1 |- 3 minimum wages obtained in this research was also found in research among elderly in the community of the city of São Paulo (21.5%).<sup>17</sup> Divergent results were identified in the survey among the elderly in the urban area from a city in Rio Grande do Sul (Brazil) which the majority of alcohol-aged elderly people reported receiving less than one monthly minimum wage (62.1%);<sup>26</sup> and a study carried out with elderly people from the community of Porto Alegre (Brazil) obtained a superior result, with a higher percentage of income of 3 minimum wages (53.3%).<sup>23</sup> Income is considered a factor that influences access to health services, as well as on satisfaction with income.<sup>30</sup> In addition, numerous income-related difficulties such as food and medicine supply can lead to health deficits and greater vulnerability to adverse outcomes in the elderly.

In agreement with the findings of the present study, national surveys conducted in the community<sup>17,12</sup> found that the elderly with abuse and probable alcohol dependence had five or more morbidities. It is important to note that, among the elderly, drug abuse is more frequent due to the various comorbidities existing in this age group, mainly drugs for the treatment of depression, anxiety and other diseases.<sup>31</sup> It is noted that 90% of elderly take some type of medication daily, and many drugs prescribed for everyday situations have a potential for interaction with alcohol, resulting in harm to their health.<sup>32</sup>

In relation to the indicative of depressive symptoms, the current research presents a higher percentage of elderly people without such symptoms, being consistent with national<sup>17,12</sup> and international investigations<sup>21</sup> performed with the population. For a number of reasons, the elderly do not assume alcohol consumption, either because of embarrassment, insecurity, fear, dementia, lifestyle and/or isolation, which further impairs the identification of the abuse and makes it impossible to initiate early interventions.<sup>7</sup>

Thus, it is of paramount importance that the user of alcohol and other drugs is treated in a holistic way, giving prominence in disease prevention and health promotion, in the same way as it promotes the monitoring of these elderly people through different networks and care lines, with the aim of reducing the damage to their health.<sup>2</sup>

As for the associated factors, national studies conducted with elderly people living in the urban area,<sup>17,20</sup> institutionalized in CAPS<sup>24</sup> and international surveys conducted in the community<sup>18,21</sup> found that males were associated with abuse and probable dependence on alcohol. This association has been previously demonstrated in several elderly populations and is presumed to be directly related to sociocultural factors.<sup>18,24–25</sup> Alcohol being identified as the main drug of abuse of men may also be linked to the accessibility of this drug by the population.<sup>24</sup> As this substance is accepted by society, alcohol has its consumption allowed and stimulated by the means of mass dissemination, which mention it as an element of socialization, distraction, diversion and social interaction.<sup>33</sup>

Regarding gender issues and their influence on alcohol consumption, it is observed that there is a greater tendency for men to ingest a high amount of alcoholic beverage and to have more health damage compared to women.<sup>24</sup> The consequences of alcohol abuse in the elderly can be extremely worrying, given its greater susceptibility to its effects and its relation to the increased risks of cognitive dysfunction and dementia. In this aspect, it is highlighted the importance of actions aimed to primary health care in the evaluation and monitoring of the pattern of alcohol consumption and of the specific characteristics of this population.<sup>34</sup> A more humanized and free of prejudices treatment can be one of the factors that will guarantee a qualified service for these people, in addition to contributing to their recovery.

The abuse and probable dependence on alcohol was associated with the presence of indicative depressive symptoms in the elderly, corroborating national studies.<sup>24,26</sup> In this context, it is important to monitor the mental health of these individuals, especially men, and the clinical and psychiatric comorbidities that may intensify some of the symptoms related to the disease.<sup>24</sup>

Depression is the most prevalent psychiatric disease among the elderly;<sup>35</sup> regularly it is not diagnosed and therefore is not treated by them. However, it influences quality of life, elevating the economic burden by its direct and indirect costs and, therefore, can lead to suicidal tendencies.<sup>35</sup>

In the elderly, psychiatric scenarios include, notably, dementia, depressive states, anxiety disorders, psychotic conditions, but depression is the most important mental health problem in this age group.<sup>13</sup>

Manifestations of depressive symptoms resulting from the high number of tasks and emotional exhaustion are frequent in the elderly, caregivers and family members, with negative consequences for physical and psychological health and for the quality and perspective of life. In this way, more and more scholars and researchers have shown an interest in the identification of preventive factors and effective treatments of this disease.<sup>12</sup>

Thus, it is highlighted that abusive alcohol consumption in the elderly is prevalent, in this way, it is considered necessary to promote actions aimed at preventing the excessive consumption of alcohol in primary health services, in accordance with the activities advocated by the program of governmental intervention.<sup>36</sup>

From the data obtained, it is evident that there are few similar studies that address the topic of alcohol abuse in the elderly in the home environment. Thus, it is necessary to carry out new studies on the subject with the intention of improving the quality of care provided to the alcoholic elderly, proposing that nurses assume the role of manager in the care of these clients.

Regarding the limitations of this study, although the transversal nature of the study was adequate to the investigation of the established objectives, this design does not allow us to establish causal relations; even though it allows exploring the associations found; and the consumption of alcohol was self-reported by the elderly, may comprise an information bias, since many people, out of shame, fear or simply underestimating their consumption, end up not reliably responding to the actual pattern of alcohol consumption that they adopt in their daily lives.

## CONCLUSION

The prevalence of abuse and probable alcohol dependence among the elderly living in the urban area of Uberaba (Brazil), was 26.5%.

The socio-demographic and economic profile of the two groups (with and without abuse and probable dependence on alcohol) were similar, with the predominance of younger elderly people (60 |- 70 years old) living with spouse or partner and 1 |- 5 years of schooling. Exceptions are made for gender, in which among the elderly with alcohol abuse, the male gender predominated and, for the non-abusive, the female gender; and individual income, in which the elderly with alcohol abuse had a predominance of individual monthly income between 1 |- 3 minimum wages, and those without alcohol abuse obtained individual income up to one minimum wage.

Regarding the clinical characteristics, both the elderly with abuse and probable dependence of alcohol and those who did not have abuse presented higher percentage for five or more morbidities. Also, in both groups, the absence of an indication of depressive symptoms prevailed. However, the elderly with abuse and probable alcohol dependence had a higher percentage of depressive symptoms presence in relation to those who did not have such dependence.

Abuse and probable alcohol dependence were associated with males and the presence of depressive symptoms. There was no association between the studied variables: age group, schooling, income, marital status and number of self-reported morbidities.

The results found are recommended to obtain knowledge on the subject, helping to make right decisions in the field of policies related to aging and mental health; favoring the training of the nursing professional with implications for the practice and the development of professional activities, since this research helps the continuous improvement of the activities in the various sectors of the area.

The present study contributes to the knowledge about the use, abuse and probable dependence of alcohol in the elderly, as well as its associated factors. From this perspective, this research will provide subsidies for the development of health actions strategies with the purpose of providing plans for health promotion, disease prevention and rehabilitation of the elderly who abuse alcohol.

In addition, such knowledge is fundamental in the implementation of preventive measures against alcoholism in the elderly and the understanding of nursing in this sector, being that the nursing team is majority in health services, and consequently, responsible for managing the care provided to these people, in all aspects; in this way, they must be able to assist in the recovery and rehabilitation process, in order to collaborate in directing well-qualified health care and promoting a healthy aging.

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## NOTES

### ORIGIN OF THE ARTICLE

Article extracted from thesis - Prevalence and Factors Associated with Abuse and Probable Alcohol Dependence among Elderly People in the Urban Zone of the Municipality of Uberaba-MG, presented to the Postgraduate Program in Health Care, *Universidade Federal do Triângulo Mineiro*, in 2016.

### CONTRIBUTION OF AUTHORITY

Study design: Guimarães MSF, Tavares DMS.

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Data analysis and interpretation: Guimarães MSF, Tavares DMS.

Discussion of the results: Guimarães MSF, Tavares DMS.

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### ETHICS COMMITTEE IN RESEARCH

Approved by the Human Research Ethics Committee of the *Universidade Federal do Triângulo Mineiro*, under the number of Certification of Presentation for Ethical Assessment-CAEE: 26148813.0.0000.5154, opinion Nº 573.833

### CONFLICT OF INTERESTS

No any conflict of interest.

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