

The use of polypharmacy and alcohol consumption in the elderly population of a district of Brasília

O uso de polifarmácia e o consumo de álcool na população de idosos de um bairro de Brasília

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RESUMO

Objetivo: inquéritos domiciliares investigaram a polimedicação e a ingestão de álcool em 202 idosos residentes em um bairro de Brasília, assistidos pela equipe local de saúde da família. **Método:** Trata-se de estudo transversal descritivo, do tipo inquérito domiciliar. **Resultados:** Verificou-se que 20,7% eram polimedicados (n=42), mas destes somente 7,32% (n=3) consumiam álcool. 15% dos idosos (n=31) ingeriam álcool regularmente, mas somente 16% (n=5) de forma abusiva. **Conclusão:** os idosos em questão evitavam hábitos de risco como o uso do álcool em excesso.

Descritores: Idosos, Polifarmácia, Consumo de Álcool

ABSTRACT

Objective: In this study, domiciliary surveys investigated the polypharmacy and alcohol. **Method:** polypharmacy and alcohol were investigated intake 202 seniors living in a district of Brasília, assisted by the local family health program. **Results:** 20.7% evidenced polypharmacy (n = 42) of whom only 7.32% (n=3) consumed alcohol in a regular basis. Only 15% (n = 31) of the studied population consumed alcohol, of whom only 16% (n = 5) in an abusive form. **Conclusion:** investigated elderly used to avoid risk habits such as excessive alcohol intake.

Descriptors: Elderly, Polypharmacy, Alcohol intakeh.

ORIGINAL

Introduction

Conventional protocols for the treatment of chronic noncommunicable diseases (CNCD), with a higher incidence in the elderly, provide for the association of drugs, exposing this population to a greater risk of polymedication.¹⁻³ Polymedication, or polypharmacy, is a term defined as the simultaneous and chronic use of multiple drugs.⁴⁻⁶

In the elderly patient, polypharmacy has a great impact, as it leads to adverse drug reactions and drug interactions.⁷⁻⁸ Polypharmacy needs to be continuously monitored against the introduction of new drugs, self-medication and its association with dangerous habits such as alcoholism and smoking.⁹⁻¹²

Alcohol use among the elderly is commonplace, although this habit is not adequately evaluated and considered¹³, which indicates the need for greater observation of alcohol abuse in this age group. A decade ago, the prevalence of alcohol use in Brazil by non-institutionalized elderly was 10% ¹⁴.

Health policies against alcohol abuse are directed at the young population, leaving an emerging gap for the diagnosis and treatment of the elderly. When aging, the individual undergoes natural physiological changes that make him more susceptible to alcohol. When alcohol consumption is associated with polypharmacy, the elderly organism is even more exposed to health problems and alcohol and / or drug poisoning.¹⁵ Based on the above, this study aimed to investigate the consumption of alcoholic beverages and the practice of polypharmacy in elderly residents in Brasília / DF.

Method

This is a cross-sectional descriptive study of the household survey type. Polypharmacy was considered as the use of five or more drugs simultaneously.^{2,7,16-17}

The study was carried out in the neighborhood of Granja do Torto, in Brasília - Federal District, where visits were made to each household, with the aid of a database with the addresses of the neighborhood, excluding commercial real estate. When there was no elderly person in the residence, the interviewer moved to the next home, and so he continued to map the entire neighborhood.

A sample of 202 elderly people identified in the active home search in the neighborhood participated in the study. For individuals to be included in the research, they should live in the neighborhood of Granja do Torto-DF, be aged 60 years or older, accept to participate in the research and be in a cognitive condition to respond to the questionnaires. Those elderly individuals who were identified with a diagnosis of dementia informed by the caregiver and / or familiar or appointed by the Mini Mental State Examination (MMSE) 18 - as well as any other condition that makes it impossible to sign the ICF and answer the questions - were excluded from the sample .

During home visits, the elderly answered a sociodemographic questionnaire with questions about age, sex, marital status, housing, schooling, family and individual income. A questionnaire structured in two blocks, with questions about diagnosed diseases, alcohol use and medication use was also applied. In the first block, data were collected on the pattern of consumption of

alcoholic beverages and their motivations. In block 2, data regarding the medicines used were collected. Thus, the elderly were divided into a polymedicated group (GP), for the elderly who used five or more drugs and a non-medicated group (GNP).

The descriptive analyzes of the collected data were performed by mean, standard deviation and relative frequencies. The Smirnov Kolmogorov test was performed to verify the normal distribution of the sample. For the comparisons between the frequencies of events of the groups, the X2 test was performed. For the analysis of risk, chance and prevalence related to the variables of alcoholism and polypharmacy, the odd ration method was used. For the comparisons between the groups the Wilcoxon test was used. The SPSS-IBM 22.00 for Windows software was used for the analyzes, with the significance level stipulated being $\alpha \leq 0.05$.

The project was submitted to the CEP of the Catholic University of Brasilia, with number CAAE: 50067315.5.0000.0029. The elderly were invited to participate in the study by signing the Term of Free and Informed Consent (TCLE), according to Resolution of the National Health Council No. 466/2012.

Results

None of the 202 elderly patients had insufficient cognitive function or dementia. Everyone accepted to volunteer in the survey. The sociodemographic data of the participants show that most of the elderly (41.08%) have between 8 and 11 years of schooling and the majority of the group is composed of women (56%), is married (63.66%) and not makes use of alcoholic beverages (84.7%) (Table 1).

Table 1- Stratified sociodemographic data regarding alcohol consumption and the use of polypharmacy, in the residents of a district of the Federal District.

Characteristics	%	Total (n=202)	Non-consumer of alcohol (n=31)	Consumers of alcohol (n=171)
Gender	100%	202	15,3% (31)	84,7% (171)
Men	43,6%	88	54,8% (17)	41,5% (71)
Women	56,4%	114	45,2% (14)	58,5% (100)
Marital Status				
Single	5,9%	12	19,4% (6)	3,5% (6)
Married	63,4%	128	61,3% (19)	63,7% (109)
Widowed	23,3%	47	16,1% (5)	24,6% (42)
Divorced	7,4%	15	3,1% (1)	8,2% (14)
Education level (in years of study)				
< 4 years	35,6%	72	22,6% (7)	38,0% (65)
Entre 4 e 7 years	21,8%	44	19,45% (6)	22,2% (38)
Entre 8 e 11 years	41,1%	83	58,1% (18)	38,0% (65)
≥ 12 years	1,5%	3	0,0% (0)	1,8% (3)
Medicines				
Non poly drug users	79,7%	161	17,39% (28)	82,61% (133)
Poly drug users	20,3%	41	7,32% (3)	92,68% (38)

Among the 31 elderly people who reported consuming alcoholic beverages, the majority said that alcohol did not hinder memories of parts of the day or night (90.8%) and was composed of men (54.8). Among other reasons, this majority drinks to relax (54.8%), because it does well for health (19.4%) or for fun (6.5%). However, when the weekly doses were calculated, an average intake of 4.44 ± 4.18 doses per week was observed. Of these elderly, almost one sixth (16.1%) makes abusive use of alcohol, ie consumes an amount of alcohol above the recommended. No elderly person reported being dependent and only one reported feeling ill after concomitant intake of medicine and alcohol.

Regarding medication, of the 202 elderly interviewed, 41 consume more than five medications on a continuous basis, and 161 do not use polypharmacy, which is more present in the elderly who do not use alcohol ($n = 133$). Among the individuals in the sample who use alcohol, 7.32% use more than five medications, however, there is no statistical difference ($p = 0.11$) of these in relation to those who do not use alcohol. Comparing the mean number of drugs ingested by the alcoholic beverage group (2.32 ± 1.97) with the non-alcoholic beverage group (2.33 ± 2.00), it was observed that there was no significant difference between the amount of doses consumed ($p > 0.05$). Regarding the use of polypharmacy, Odd Ratio = 2.67 (limInf 0.77, limsup 9.25) was observed in the group that does not consume alcohol in relation to what it consumes (Figure 1). The investigation of the pharmacological group shows the antihypertensives as the main group used by the elderly (53.0%), followed by phytotherapies (16.8%) and diuretics (10.9%). There was no statistically significant difference in relation to the types of drugs ingested between the two investigated groups ($p > 0.05$).

Discussion

The prevalence of alcohol consumption among the elderly found in this study was 16.1%, a slightly higher percentage than other studies that indicate between 2% and 11%.^{14,19,20} Married elderly patients presented a higher prevalence of alcohol consumption (61.3%), which contradicts some studies that point to widowhood and loneliness as stimulating factors for alcohol use in the elderly.²¹⁻²²

Another factor that may be protective or promoting the use of alcohol is the degree of schooling, since it may interfere with vulnerability to stress²³, facilitating the search for alcohol as an escape.²⁴ In this work, however, it was observed that the level of schooling of the majority of the elderly was from eight to eleven years of studies, whether users of alcoholic beverages (58.1%) or not (38%). The schooling of the participants is much higher than the Brazilian average of 2014, of 4.8 years for this age group.²⁵

Some authors point out that moderate alcohol consumption shows a positive association for the perception of health of the elderly.²⁶⁻²⁷ In fact, in reports during the interviews it was possible to identify that, among the reasons for the consumption of alcoholic beverage, the consumption of wine was regular, because it is good for the heart.

Although the majority of the studied population is women, men account for 54.8% of the elderly who use alcoholic beverages. This higher prevalence of

alcohol use among elderly men is associated with sociocultural factors, since alcohol consumption was not a habit of life observed among women of this age group.^{21,28} However, some studies show that the number of women who is consuming alcoholic beverages and that female consumption patterns grow in a linear way.²⁹⁻³² which may intensify consumption by the elderly in the medium term.

In the United States, the National Institute on Alcohol Abuse and Alcoholism (NIAAA) uses the term moderate use to refer to consumption that does not cause individual harm or social problems to the consumer of beverages alcohol use.³³⁻³⁴ Moderate use is defined as the use of up to 14 units / week for men and up to 7 for women. For individuals 65 years of age or older, NIAAA recommends that no more than 3 daily doses of alcohol be used to avoid problems, with no more than 7 doses per week. In the present study, abuse was perceived in only five individuals: two men and three women, totaling only 2.5% of the participants.

As noted above, the mean number of medications ingested by those who did (2.32 ± 1.97) or not (2.33 ± 2.00) alcohol use did not differ significantly ($p < 0.05$). While only three individuals (9.7%) who use alcoholic beverages are classified as polymedicated, in the group that is abstemious this number is 28 individuals, which is equivalent to a 2.67 times greater chance than individuals who do not consume alcohol.

It is emphasized that the practice of polypharmacy does not necessarily indicate that the prescription and use of the drugs are incorrect. However, there are high prevalence rates of polypharmacy and the use of multiple medications increases the risk of adverse reactions and drug interactions.

A multicenter study by Leon-muñoz et al (2015), involving 3,058 elderly individuals in the Spanish population, associated moderate alcohol use with a 24% increase in the risk of adverse drug reactions.³⁵ Another drug-drug interaction with alcohol which may compromise the treatment of the elderly is that of oral hypoglycemic agents. In this study, 19 elderly (7.3%) reported concomitant use of metformin and ethanol, resulting in an increased risk of lactic acidosis.³⁶

Conclusion

The present study points to a moderate frequency of alcohol use in the population studied, but may compromise drug therapy, especially in the case of diabetic elderly. As the studied neighborhood is assisted by a family health team, it is inferred that the elderly are more aware of their own health, thus avoiding risky habits to their aging, such as excessive alcohol use.

It is concluded that studies such as the present, which seek to contribute to the understanding of the relationship between alcohol use and polypharmacy, can help in the conduct of health actions aimed at improving care for the elderly and the quality of their aging.

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