

# Characterization of alcohol consumption among the population ascribed to the Family Health strategy

*Caracterização do consumo de álcool de uma população adscrita à estratégia Saúde da Família*  
*Caracterización del consumo de alcohol en una población adscrita a la estrategia Salud de la Familia*

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## ABSTRACT

**Objective:** To characterize alcohol consumption among the population enrolled in the Family Health Strategy (FHS) in the city of Rio de Janeiro, Brazil. **Methods:** The study was developed through a household survey with a random sample of 301 individuals who answered a form containing sociodemographic and alcohol consumption variables, besides the Alcohol Use Disorders Identification Test. Exploratory data analysis was performed in SPSS version 13.0, using single frequency distribution. **Results:** The proportion of abstainers was high (50.5%); nevertheless, high levels of alcohol consumption have been identified among drinkers (75.2%). **Conclusion:** It is important for the FHS and Brazilian public policies to consider the development of actions to prevent alcohol abuse, through the dissemination of information on the adverse consequences for health and quality of life of individuals and populations this consumption pattern can entail.

**Keywords:** Alcohol Drinking; Mass Screening; Family Health Program; Public Health Nursing.

## RESUMO

O objetivo deste estudo foi caracterizar o consumo de álcool de uma população adscrita à Estratégia Saúde da Família (ESF) do município do Rio de Janeiro, Brasil. **Métodos:** Inquérito domiciliar desenvolvido com amostra de 301 indivíduos que responderam a um formulário contendo variáveis de caracterização sociodemográfica e do consumo de álcool, além do *Alcohol Use Disorders Identification Test*. A análise exploratória dos dados foi feita no *software* SPSS versão 13.0 com distribuição de frequências simples. **Resultados:** A proporção de abstêmios mostrou-se alta (50,5%); no entanto, identificaram-se elevados níveis de consumo excessivo de álcool entre os bebedores (75,2%). **Conclusão:** Destaca-se a importância da ESF, e, também, que as políticas públicas brasileiras consideram o desenvolvimento de ações de prevenção ao consumo excessivo de álcool, por meios da disseminação de informações sobre as consequências negativas deste consumo à saúde e à qualidade de vida do indivíduo e das populações.

**Palavras-chave:** Consumo de bebidas alcoólicas; Programas de rastreamento; Programa Saúde da Família; Enfermagem em saúde pública.

## RESUMEN

**Objetivo:** Caracterizar el consumo de alcohol de una población adscrita a la Estrategia de Salud Familiar (ESF) en Rio de Janeiro, Brasil. **Métodos:** Averiguación domiciliar desarrollada con muestra de 301 individuos que respondieron a un formulario conteniendo variables sociodemográficas y del consumo de alcohol, además del *Alcohol Use Disorders Identification Test*. El análisis exploratorio de los datos fue hecho en el *software* SPSS 13.0, con distribución de frecuencia simple. **Resultados:** La proporción de abstemios se mostró alta (50,5%), sin embargo se identificaron elevados niveles de consumo excesivo de alcohol entre los bebedores (75,2%). **Conclusión:** Se destaca la importancia de la ESF y también que las políticas públicas consideren el desarrollo de acciones de prevención al consumo excesivo de alcohol, a través de la diseminación de informaciones sobre las consecuencias negativas que este consumo ocasiona a la salud y a la cualidad de vida del individuo y de las poblaciones.

**Palabras-clave:** Consumo de Bebidas Alcohólicas; Tamizaje Masivo; Programa Salud de la Familia; Enfermería en Salud Pública.

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Submitted on 08/27/2012.  
 Resubmitted on 04/04/2013.  
 Accepted on 07/06/2013.

DOI: 10.5935/1414-8145.20140014

## INTRODUCTION

It is estimated that about two billion people on the planet consume alcohol, corresponding to approximately 40% of the global population over 15 years of age. It is important to highlight, however, that the World Health Organization consider the consumption of this substance as one of the main factors that contribute to health problems, responsible for 3.2% of all deaths around the world<sup>1</sup>.

Alcohol consumption becomes even more important in Latin America as, in this region of the planet, about 16% of the years of useful life lost due to premature death or disability are related to the consumption of this substance, four times higher than the global average (4%)<sup>1</sup>.

In the I National Survey of Alcohol Consumption Patterns in the Brazilian Population<sup>2</sup>, it appears that 52% of the Brazilian consume alcohol, half of whom drink occasionally and the other half at least once per week. The results of the same study also indicate that a quarter of these individuals present alcohol-related problems, consuming potentially harmful quantities of alcohol.

Therefore, studies that characterize alcohol consumption in different population groups can help to understand this phenomenon, as well as to identify the magnitude of the abuse problem, and are fundamental to provide health managers with information for the development of actions to cope with this problem<sup>3</sup>.

Due to the great prevalence of alcohol abuse and related problems and the importance of primary healthcare services, which are strategic to put in practice actions for the early identification and prevention of health problems, studies are needed to characterize alcohol consumption among primary care service users, as the results of these studies will permit further knowledge on the theme, besides the confirmation and/or comparison with results from other Brazilian studies<sup>4</sup>.

Moreover, the Family Health Strategy (FHS), considered as a reorientation strategy of the care model and the main entry door to the Brazilian unified health system, serves as an outstanding scenario for the early identification of alcohol abuse. As the healthcare level that is closest to the community, FHS professionals are in an important position to identify individuals with hazardous alcohol consumption<sup>5</sup>.

It should be highlighted that the alcohol consumption problem in the populations ascribed to the FHS, a theme which the nurses working in the system have already acknowledged as important, is not only relevant because of the epidemiological profile of the Brazilian population, but also because of the medium and long-term consequences for individual health, the family impact and the consequences the consumption of this substance provokes in society<sup>6</sup>.

In view of the above, the goal in this study was to characterize the alcohol consumption in an adult population ascribed to the FHS in Rio de Janeiro, Brazil.

## METHOD

The study was developed through a household survey in an area ascribed to the FHS located in the West of the city of Rio de Janeiro (RJ), Brazil. In total, 587 families or 3476 people were ascribed to the Family Health Unit (FHU), which consisted of a minimal Family Health team (one physician, one nurse, one nursing technician and six community health agents).

The study participants were selected through a simple random sampling process in the software Epi-Info version 3.5.1 for the sampling calculation in surveys. The sample size calculated consisted of 279 people. The intent was to interview 307 though, estimating a loss of about 10% due to refusal or other reasons.

To select the 207 individuals, the following phases were followed: all 3476 registration forms at the FHU were analyzed and those of the 1016 adults who complied with the inclusion and exclusion (individuals with mental/cognitive disability and pregnant women) criteria were separated and numbered.

Next, the 307 individuals were drafted from the previously number registration forms. Among the 307 individuals selected, six (1.95%) were lost due to refusal to participate in the study, so that the final sample consisted of 301 subjects.

The household visits were not previously scheduled and took place in November and December 2010, when a single researcher interviewed the individuals in a private place at home without the presence of third parties.

The research form contained sociodemographic variables (gender, age, education, marital status, occupational status and religion) and variables to characterize the alcohol consumption (most common place of alcohol consumption and most consumed type of beverage), besides the Alcohol Use Disorders Identification Test (AUDIT)<sup>7</sup>. The AUDIT was chosen because it is the best instrument for use in primary healthcare services in comparison with other alcohol consumption characterization instruments<sup>7,8</sup>.

The AUDIT consists of ten questions: the first three assess quantity, frequency and drunkenness; the next three addiction symptoms; and the last four assess the risk of hazardous consequences for the user. All individuals answer at least three questions: the 1<sup>st</sup>, the 9<sup>th</sup> and the 10<sup>th</sup>, which inquire about the frequency of alcohol consumption, related problems and suggestions to interrupt it, respectively. When the individual answers the 1<sup>st</sup> question affirming that (s) he does not consume alcohol, only the 9<sup>th</sup> and 10<sup>th</sup> question are asked, terminating the questionnaire.

Individuals who affirm that they consume alcohol in response to the first question answer questions 2 and 3. If the sum of the answer scores for items 2 and 3 is equal to zero, however, the respondents will only answer questions 9 and 10. On the opposite (score  $\geq 1$ ), they continue answering the AUDIT questions. Hence, it is important to highlight that not all individuals answer all ten questions.

Initially, the data were analyzed through the review and manual coding of the forms. Then, the data were typed in Epi-info software, version 3.5.1, and submitted to exploratory statistics in SPSS version 13.0, using simple frequency distribution to describe the study population and the characteristics of their alcohol consumption.

It should be highlighted that approval for this study was obtained from the Research Ethics Committee of the Municipal Health and Civil Defense Secretary in Rio de Janeiro, under protocol 132/2009.

## RESULTS

The average age of the study participants was  $39.2 \pm 12.0$  years and little more than half of them (59.8%) were women. As regards education, half of the interviewees (50.5%) informed they had finished primary education and the majority (65.4%) was married or lived with a fixed partner. What religion is concerned, 38.2% of the subjects informed they were Evangelical and, in terms of employment, little more than half (65.8%) was employed.

Concerning the frequency of alcohol consumption, half of the interviewees (50.5%) affirmed never drinking, 10.0% between two and three times per week and 2.3% four times or more per week (Table 1).

**Table 1.** Frequency of alcohol consumption in the user sample at the FHU under analysis, Rio de Janeiro, RJ, Brazil, 2010 (n = 301)

Variable	N	%
Consumption frequency		
Never	152	50.5
Monthly or less	44	14.6
2 to 4 times/month	68	22.6
2 to 3 times/week	30	10.0
≥ 4 times/week	7	2.3

The most common places where the users consumed alcohol (45.5%) were their own house (51.3%) and bars (39.3%), with beer and/or draft beer as the most consumed alcoholic beverages (83.2%), followed by wine (10.0%) and liquor (6.8%).

It was observed that 18.8% of the alcohol consumers in the sample affirmed that, on a typical consumption day, they consume five or six standard doses of alcohol, while 21.5% affirmed ten doses or more on these occasions. When asked about the consumption frequency of six or more standard doses of alcohol, 36.9% of the interviewees answered they never consumed this quantity, while 22.1% answered they consumed it weekly (Table 2).

Twenty-eight percent of the interviewees were unable to stop drinking somewhat frequently after they had started;

**Table 2.** Standard doses of alcohol commonly consumed by drinkers in the sample of FHU users under analysis, Rio de Janeiro, RJ, Brazil, 2010 (n = 149)

Variable	N	%
Number of standard doses * on a typical consumption day		
1-2	37	24.8
3-4	37	24.8
5-6	28	18.8
7-9	15	10.1
10 or more	32	21.5
Frequency of ≥ 6 standard doses on a typical consumption day*		
Never	55	36.9
Less than monthly	29	19.5
Monthly	28	18.8
Weekly	33	22.1
All/almost all days	4	2.7

\* On average, one standard dose of alcohol corresponds to a 350 ml can of beer or draft beer, a 90-ml glass of wine, one dose of liquor or a small bottle of any ice drink. Each standard dose contains about 10-12 g of alcohol 1.

33.1% had already stopped doing what they were expected to because they had drunk; 14.4% had already needed to drink in the morning in order to be able to feel well throughout the day after they had drunk a lot the day before; 44.9% had already felt guilt or remorse because they had drunk and 37.3% had already been incapable of remembering what had happened due to the drink (Table 3).

## DISCUSSION

The proportion of abstainers in the area ascribed the FHS under analysis was high (50.5%), similar to the findings in population-based studies<sup>2,3</sup> and studies conducted in Brazilian primary healthcare services<sup>9,10</sup>. On the other hand, the drinkers revealed high levels of alcohol abuse (75.2%), showing the importance of alcohol abuse prevention actions by the FHU team where the study was developed and by Brazilian public policies.

Alcohol abuse can be characterized by high consumption levels of standard doses on a typical consumption day. In this study, little more than half of the drinkers reported that they commonly consume five or more standard doses of alcohol. It is highlighted that the consumption of five or more standard doses for men and four or more for women in a single episode increases the risk of health problems, ranging from exposure to illnesses to severe accident risks<sup>2</sup>.

It should also be highlighted that, to avoid alcohol consumption problems, healthy men can consume no more than 15 standard

**Table 3.** Characteristics of problematic alcohol consumption in the sample of FHU users under analysis, Rio de Janeiro, RJ, Brazil - 2010 (n = 118)

Variable	N	%
Frequency of drinking without being able to stop		
Never	85	72,0
Somewhat frequently	33	28,0
Stopped doing what was expected due to alcohol		
Never	79	66,9
Somewhat frequently	39	33,1
Need to drink alcohol in the morning		
Never	101	85,6
Somewhat frequently	17	14,4
Felt guilty after drinking		
Never	65	55,1
Somewhat frequently	53	44,9
Incapable of remembering what had happened the night before due to drinking		
Never	74	62,7
Somewhat frequently	44	37,3

doses/week and healthy women no more than 10 standard doses/week, or no more than two standard doses/day for women and no more than three standard doses/day for men<sup>1</sup>.

It is known that many factors contribute to the development of alcohol-related problems and that one of the main factors is the lack of knowledge about the usage limits and about the risks associated with abuse<sup>7</sup>. Therefore, the dissemination of information about the countless negative consequences for individuals and populations' health and quality life can entail is fundamental to cope with this problem in the context of the areas ascribed to the FHS.

Most of the interviewees indicated the own home as the most common place to consume alcoholic beverages, supporting assertions in the literature about the start and maintenance of alcohol consumption at home, against the background of social acceptance and stimulated by the family<sup>11</sup>.

The interviewees indicated beer and/or draft beer as the most consumed beverage, similar to the Brazilian population, considering that, of all standard doses consumed per year by Brazilian male and female adults, of any age and region in the country, about 61% relate to beer and/or draft beer<sup>2</sup>.

Symptoms of problematic alcohol consumption (frequent drinking without being able to stop, not doing what is expected due to alcohol, need to drink in the morning, feeling guilty after drinking and inability to remember what happened the night

before because of drinking) were identified in a significant part of the interviewed drinkers. Therefore, it should be highlighted that individuals with alcohol-related problems frequently seek care at primary healthcare services<sup>4,9</sup>, turning the characterization of alcohol consumption into a need in FHS services, as it helps the professionals working there to identify people who can benefit from the reduction or cessation of alcohol consumption.

Therefore, the health services need to be prepared to identify alcohol abusers early and to involve them in interventions<sup>7</sup>. The difficulties these services and health professionals experience to diagnose, motivate, treat or forward patients with problematic alcohol consumption for treatment are well-known though, especially because, in general, these professionals only look for alcohol addiction<sup>12</sup>, although a substantial part of the clinical and public health problems affect the so-called abusers<sup>7,9</sup>.

In that sense, health education institutions need to include the theme alcohol abuse and its consequences in their curricula, and not only alcohol addiction as the sole problem deriving from the use of this substance. In addition, it is important for health managers to offer training to the professionals working in health services with a view to the approach of alcohol users, emphasizing measures to fight and control abuse, through prevention and health promotion, mainly in FHS services, where these actions are prioritized.

As the FHS professionals' approach tends to be focused on the undesirable symptoms of alcohol consumption and not on the early identification and prevention of related damage, nurses' participation in alcohol consumption control actions as members of the multidisciplinary health team is fundamental to cooperate with the promotion of changes in the alcohol consumption patterns of public health service users<sup>6</sup>.

In view of the complexity that permeates alcohol consumption, discussing this theme with their patients represents a challenge for nurses. Therefore, health education is relevant as a nursing practice, especially when focused not only on individuals, but also on families and groups<sup>11</sup>, as nurses are competent professionals to put in practice actions aimed at preventing problems deriving from alcohol abuse, especially in primary healthcare services<sup>13</sup>.

In view of the above, discussing the alcohol consumption problem in the context of the FHS is almost unquestionable, considering that the main potential of this strategy lies in the effective involvement of its professionals in preventive care practices in the community<sup>14</sup>. Hence, it is essential for these professionals to consider the relevance of patients' alcohol abuse in this care context, especially nurses, with a view to cooperating with the development of strategies to prevent the problems it causes.

This study did not intend to describe the alcohol consumption in the research population based on classical variables (gender, age, education etc.), but to characterize it in global terms, thus offering a panorama of this phenomenon in the area ascribed to the investigated FHS. Moreover, the contributions this type

of characterization offers to preventive nursing practices in the context of the FHS could be discussed and valued.

It should be mentioned, however, that despite the limitations, such as the possible occurrence of a memory bias, the development in a single FHS area in the city of Rio de Janeiro, as the study design was appropriate to the objectives, the research sample was considered appropriate to characterize the alcohol consumption in the adult population living in the area ascribed to the FHS. Therefore, its results contribute to further knowledge about the theme and provide important information to local health managers, alerting about the need for actions to cope with this problem.

## CONCLUSION

The proportion of abstainers identified in the area ascribed to the FHS under analysis was high (50.5%), but the drinkers revealed high levels of alcohol abuse (75.2%), that is,  $\geq 3$  standard doses on a typical consumption day. These results indicate that it is important for the FHS and Brazilian public policies to consider the development of alcohol abuse prevention actions. Therefore, disseminating information about the countless negative consequences alcohol abuse can cause for individual and population health and quality of life is fundamental to cope with this problem in the areas ascribed to the FHS.

Finally, the role of nurses in this context is highlight, as their health education practice can enhance people's knowledge about the risks and consequences of alcohol abuse. In addition, the systemized early identification and damage prevention related to alcohol abuse in the FHS, during the nursing consultations as well as during home visits, represent opportunities for nurses to act preventively and exercise their professional autonomy in coping with the problems this consumption causes.

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