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ETHNISM AND FACTORS PREDICTING TO THE ABUSIVE USE OF ALCOHOL

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ABSTRACT

Ethnicism is seen as abusive use of alcohol, a chronic intoxication, which harms an individual's physiological and psychic system, used to provide relief from undesirable manifestations offered by abstinence. This is a quantitative research, observational and cross-sectional, in a municipality in the interior of Bahia (latitude: 14° 51' 58" S; longitude: 40° 50' 22" W). The same is a fraction of a project titled "Epidemiological profile of obesity in the city of Vitória da Conquista / BA". We observed that the highest consumption of alcohol among individuals with "stressed life" is in the female sex, and most individuals with a diagnosis of alcoholism are stressed; the act of consuming alcoholic beverages is not influenced by the fact that the person is anxious or working the same; the schooling can influence the consumption of alcoholic beverages, presenting differences between this variable; the consumption of alcohol by women did not influence overweight as well as waist circumference and abdomen, but among women drinkers have measures in the risk range; a positive relationship was observed between individuals who consumed alcohol routinely and the variable GOT and GPT. The present study showed that alcohol consumption by the subjects of the study has as main objective to provide relief from stress and anxiety situations, experience in the work environment.

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INTRODUCTION

The liver is an internal organ responsible for various functions in our body, one of them is the metabolism of substances and synthesis of proteins. In the case of alcohol, the liver metabolizes about 90% of what is ingested, mainly using the oxidative route (which is metabolized in hepatocytes), through the enzyme ADH (alcohol dehydrogenase), and MEOS (microsomal oxidation system of ethanol), and at the end of metabolism, these routes will produce acetaldehyde, a metabolite with high hepatotoxicity, causing cellular damage, inflammation and other liver diseases (BUCHO, 2012). Aminotransferases are elevated in hepatic lesions due to increased alcohol intake, so elevated levels of ALT (alanine aminotransferases), found in the liver, are considered a

specific marker of liver damage (MINCIS, MINCIS, 2005). A broad spectrum of liver damage occurs in alcoholic liver disease, which can range from steatosis to cirrhosis; inflammation, cellular damage, oxidative stress, among others, since alcohol-induced hepatitis is the most severe form of all lesions (LOUVET and MATHURIN, 2015). Alcohol is a psychoactive substance used in moments of celebration, as well as in moments of distress and suffering, in order to provide relaxation, tranquility, among other actions (ROZIN; PALMIRA; ZAGONEL, 2012). For an individual who is subjected to stress situations, a term that defines a situation in which the individual transmits external and internal responses and stimuli, alcohol will be an ally to promote relief from these stressful situations, but may cause psychological consequences as well as a high number of psychosocial

problems (Gavin *et al.*, 2015; P *et al.*, 2013). Alcohol is a psychoactive substance used in moments of celebration, as well as in moments of distress and suffering, in order to provide relaxation, tranquility, among other actions (ROZIN; PALMIRA; ZAGONEL, 2012). For an individual who is subjected to stress situations, a term that defines a situation in which the individual transmits external and internal responses and stimuli, alcohol will be an ally to promote relief from these stressful situations, but may cause psychological consequences as well as a high number of psychosocial problems (Gavin *et al.*, 2015; P *et al.*, 2013). The World Health Organization (WHO) reports that about two billion people drink alcohol, are consumed socially or by dependent individuals (REIS *et al.*, 2014). According to data from the National Anti-Drug Secretariat, there are 11% of individuals that are alcoholic, that is, they abuse alcohol, and alcohol-induced liver disease in these individuals may be high (MINCIS, MINCIS, 2005).

Obesity is a determinant risk factor for cirrhosis and alcoholic liver disease in individuals who consume alcohol too heavily (MAHLI; HELLERBRAND, 2016). The absorption of nutrients (vitamins, amino acids and proteins) is altered with the increased alcohol intake, leading to malnutrition and deregulation of the natural hepatic process in alcoholics (MINCIS, MINCIS, 2005). Classified as one of the five major risk factors for death in the world, the exaggerated and harmful use of alcohol results in 2.5 million annual deaths (TORRUELLAS; FRENCH; MEDICI, 2014). Alcoholic liver diseases account for 10% to 15% of alcohol users, and abusive and early consumption by young people may lead to future health impairment ("Cirrhosis is among the top 10 causes of death.", 2012). Due to these facts, it is necessary to evaluate the correlation of factors related to alcohol abuse, markers of liver injury, body profile and alcoholism in individuals aged 20 to 46 years of the southwestern region of Bahia.

METHODOLOGY

This is a quantitative research, observational and cross-sectional, in a municipality in the interior of Bahia (latitude: 14° 51' 58" S; longitude: 40° 50' 22" W). The same is a fraction of a project titled "Epidemiological profile of obesity in the city of Vitória da Conquista / BA". Data were collected between August 2016 and April 2017 using the stratified random approach method. The sample consisted of 200 adults aged 20-46 years. The analysis was performed considering a level of significance of $p < 0.05$, with the aid of the statistical program SPSS® 24.4, through the application of descriptive statistical analysis and Chi-square and Fisher's Exact tests. Data collection consisted of interviews with the study participants and the authors used a questionnaire that contained the demographic variables (sex and education) and sociodemographic variables and analysis of alcohol consumption. According to Marconi; Lakatos (2010), this type of semi-structured instrument "allows to explore a question more broadly". Participants were informed about the methods to be used for collection according to Resolution 466/12 (National Health Council), which constitutes international research documents involving human beings. It should be noted that the project was approved by the Research Ethics Committee of the Faculdade Independente do Nordeste (Opinion No. 1,859,545).

RESULTS

An increase in alcohol consumption caused by stressful life is observed among women, and individuals who are diagnosed with alcoholism most have stress. The fact that the individual consumes alcoholic beverages is not influenced by the fact that they work or be anxious. The variable education can favor the increase in the risk that alcohol can bring in relation to health, noting that the greater consumption is seen in the lower class (Class D). It was verified that alcohol consumption contributes to changes in weight in men, so in women there was no influence over excess weight, but the variable waist and abdomen presented measures in the risk range among women drinkers. There was a positive relationship between GOT and GPT among individuals who consumed alcohol routinely.

Table 1. Variables analyzed in the study regarding alcohol abuse and markers of liver injury

	Men's		Women		Total	
	Non-Alcoholic %	Ethnicist %	Non-Alcoholic %	Ethnicist %	Non-Alcoholic %	Ethnicist %
E d u c a t i o n	Incomplete elementary school	0,0	0,0	4,1	5,1	8,9
	Complete primary education	1,0	2,5	0,0	2,0	2,2
	Incomplete high school	5,1	4,1	0,0	1,0	11,1
	Full High School	5,1	11,5	8,2	14,3	28,9
	Incomplete higher education	3,1	23,8	7,1	32,7	22,2
	Complete Higher Education	7,1	21,3	5,1	21,4	26,7
	No	0,0	0,0	0,0	0,0	0,0
S C I C I A S	Class B	0	7	1,0	3,1	2,2
	Class C	7	33	4,1	21,4	24,4
	Class D	13	34	17,3	38,8	66,7
	Class E	1	4	2,0	12,2	6,7
P	Obese	8,0	52,0	4,0	8,0	26,1
	Not obese	14,0	26,0	20,0	68,0	73,9
W C	Ideal Track	19,0	61,0	18,0	56,0	80,4
	Increased Risk	3,0	17,0	6,0	20,0	19,6
A C	Ideal Track	17,0	48,0	10,0	31,0	58,7
	Increased Risk	5,0	30,0	14,0	43,0	41,3
S t r e s s	No stress	7,0	36,0	3,0	16,0	21,7
	With Stress	15,0	42,0	21,0	60,0	78,3
A n x i e t y	Without anxiety	21,0	60,0	15,0	52,0	78,3
	With Anxiety	1,0	18,0	9,0	24,0	21,7
G O T	Normal	18,5	78,5	19,4	73,5	88,6
	Changed	1,5	1,5	3,1	4,1	11,4
C P	Normal	15,6	75,0	20,2	75,5	85,3
	Changed	3,1	6,3	3,2	1,1	4,0
W o r k	Yes	21,0	69,0	19,0	53,0	87,0
	No	1,0	9,0	5,0	23,0	13,0

*WC: waist circumference; **AC: abdominal circumference; ***GOT: glutamic-oxalacetic transaminase; ****GPT: glutamic- pyruvic transaminase.

DISCUSSION

In the present study, the results obtained in relation to the use of alcohol and stress evidenced a significant increase in the consumption caused by the stressed life, mainly among the female sex, becoming a predisposing factor to the abusive use of this substance, because it is believed that it acts as a defense against the disappointments of reality with which it can not face satisfactorily, being the main reason to forget the problems faced by the individual (P *et al.*, 2013). The data of Oliveira and her collaborators (2012) differ from the findings of the research, where in a Teaching Hospital of the Northwest of Paraná, revealed that 46.1% of the women in treatment for alcoholism had some occupation and with average age of 43 years; also showed that work and social activities contributed less to alcohol consumption, but the same author reveals that the women interviewed reported that, even with time for social and leisure activities, it was not enough to avoid consumption of alcohol. Therefore, the findings of Ferreira and her collaborators (2013) do not corroborate the results obtained by the research, revealing that the prevalence of alcohol abuse in the female space was 7.9% and the dependence of 6.1% in one population of 270 individuals, 60.7% of them women; but according to research done by Carlini *et al.*

Shows that there is a tendency in the growth in the use and abuse of alcohol in the feminine space, because they are being inserted in roles equivalent to those of men, which also changes the model of alcohol consumption, being a suggestive question for the increased consumption among females. In the findings of Moura and his collaborators (2013), they observed that some interviewees reported drinking because of stress; not being identified the origin of the same and what stressful reason led to the act of ingesting alcoholic beverages. Being evidenced only that, stress reaches all classes and environments, without restrictions, leading to psychological problems. It is clear that not only the ingestion of alcoholic beverages has become a means of immediate relief for stressful situations, but also that the circumstances that lead to stress can lead to drinking (P *et al.*, 2013). Regarding anxiety, we noticed that it did not influence alcohol consumption, since it was observed both among anxious individuals and not in a similar proportion, the data diverge from the findings of Scheffer and Pasa in 2010 that showed that about half of individuals diagnosed as chemical dependents of alcohol, presented additional identification of 28% of Anxiety Disorder, that is, patients who are dependent on alcohol developed an additional psychiatric disorder, being a substance that could lead to secondary diseases. In another study in Brazil, patients hospitalized for psychiatric complications, such as anxiety, approximately 35% presented problems resulting from the use of psychoactive substances, being the alcohol with the highest prevalence, that is, 90% of them, showing that this drug can cause in such as anxiety in the course of abstinence and intoxication (SCHEFFER, MORGANA; PASA, 2010). This is reflected in a study by Peuker and his colleagues (2010), estimating that individuals with positive perspectives regarding alcohol, such as increased confidence in social occasions or to alleviate tension, have a high predisposition to demonstrate social-emotional problems, such as anxiety.

Thus, as stress in the world of work today is a factor that leads to alcohol consumption, by providing the individual with less tension, a means of alleviating all problems at work, also a means of unloading all emotional and mental weight, in order to become a common ally. In addition to this, abusive use may induce alcohol dependence (Barros *et al.*, 2009), which corroborates the results obtained, revealing that the individual will consume alcohol regardless of whether or not they are working]. Regarding the variable alcohol use and schooling, the present study revealed that information about the risks that alcohol can bring to health may be influencing consumption, verifying a difference on this variable, where according to (SECRETARIA DE SURVEILLANCE IN HEALTH / MINISTRY DA SAÚDE, 2005) shows that alcoholism is negatively associated with the socioeconomic and educational situation. According to Ferreira and his collaborators (2012), some research shows that the higher prevalence of alcohol consumption is in individuals with lower levels of education, but also reveals that there is research indicating that higher alcohol use is present in individuals with higher schooling, in a population between the ages of 14 and older than 60, observing a contradiction in relation to it, being a suggestive question that these variables suffer under varied influences, and having complexity among them. The findings regarding alcohol consumption among women did not influence overweight or waist circumference, corroborating the results of Guimarães and her collaborators (2013), revealing that the weekly intake of wine and distillates reduction in waist

circumference (CC) by about 0.39 cm; it was also found that alcohol consumption as recommended by the World Health Organization, which corresponds to 2 doses / day for men and 1 dose / day for women, would probably not result in changes in the anthropometric measures in the attributes of the gain of weight and accumulation of fats in the body. However, positive links between adipose tissue measurements in the abdominal region and alcohol consumption were found, according to Guimarães and his collaborators (2013) in individuals who ingested alcohol in an excessive way, precisely the beer, and the higher intake of alcohol provides greater caloric gain and adipose tissue, so that the absorption of alcohol impairs the oxidation of lipids. The data of Bertolini *et al.* (2011), diverge from the data obtained by the research, revealing that half of university students aged 21.5 ± 1.96 years use harmful alcohol; remembering that women have a lower amount of ADH enzyme (gastric alcohol dehydrogenase), favoring the development of alcoholic liver diseases, mainly, and associated with organic damage caused by alcohol consumption, which may increase the risk of obesity, increase abdominal fat and body. It is observed in the data of Mahli *et al.* (2016) that more than one million women aged between 30 and 40 years in the United Kingdom, with consumption being greater than 150 grams of alcohol per week was identified to increase the relative risk for to acquire cirrhosis 3 times, and obesity in individuals who drink more than 70 grams of alcohol per week did not influence the risk of cirrhosis; since obese women (BMI greater than 30) who drink more than 150 grams of alcohol per week, the risk of getting cirrhosis has increased to more than 6 times. Recalling that in relation to the nutritional question, alcohol is the only psychotropic substance capable of giving calories to the body, with each gram of alcohol being metabolized will provide 7.1 calories, since there is an increase in the caloric needs of an individual, which is 6 to 10% per day (SERNIZON GUIMARÃES, SILVA DE AGUIAR NEMER, ARLENE FAUSTO, 2013). Since alcohol consumption can lead to a high rate of transaminases, more specifically GPT, because it is more specific in relation to a possible diagnosis of liver damage caused by high alcohol consumption (TORRUELLAS; FRENCH; MEDICI , 2014), which corroborates the results obtained.

Conclusion

The present study evidenced that the main objective of alcohol consumption by the study subjects is to provide relief from stress and anxiety situations, especially those experienced in the work environment, in order to reduce daily stress , becoming a constant ally. It was also verified that most of the population that consumes alcohol is female, which indicates a greater insertion of women in relation to roles equivalent to men, leading to situations of stress, tension and greater responsibilities. It was also observed that the higher prevalence of alcohol consumption is included in the population with low educational level, we believe that this fact is due to being a low cost drug and by the nature of this same class make it difficult to access information about the consequences that the use abuse of alcohol can cause health, which can lead to higher rates of alcohol-induced liver disease and other related pathologies, and alcohol abuse can also lead to psychological damage, social and economic life, but other studies indicate that the consumption of alcohol is higher in individuals with higher schooling, observing a contradiction regarding the variable, being a complex question. It is important to emphasize that regardless of whether or not the individual is

obese, irrational alcohol use may lead to alcoholism and health consequences, taking into account one's predisposition regarding gender, ethnicity, race and genetics.

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