# Quality of Life in Women Who Consume Alcohol Excessively

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**Abstract:** Alcoholism is a disease that affects the central nervous system, producing a sensation of pleasure, which occurs through the excessive consumption of alcoholic beverages, in a way that interferes in one's life, causing behavioral changes and dependency. When it comes to gender differences, alcohol affects females more quickly due to the higher concentration of fat tissue, due to variations that occur during the menstrual cycle and due to differences in the metabolism of alcohol. Excessive use of alcohol can affect a person's quality of life, whether in its social or individual aspects, causing diseases in the liver, stomach and/or depression, problems in the workplace, of legal nature or a violence related episode. This study aims to assess the quality of life of women who drink excessive amounts of alcohol in João Pessoa – PB/ The participants are 36 women who were seeking for support at CAPSad III, POP Center and Ruartes. All of the participants used alcohol in conjunction with other drugs, especially weed and tobacco. The data shows that in general the quality of life of women who consume excessive amounts of alcohol is low, mainly when it comes to their living conditions, showing the importance of the implementation of effective public policies towards this population.

**Keywords:** *Quality of life, women, alcohol.*

## I. INTRODUCTION

The irresponsible use of alcohol is a matter of public health. In Brazil, 28% of the adult population has used alcohol in excess at least once a year. Considering a population of 120 million people who are 18 years old and older, it is estimated that 33,6 million adults have drank excessively at least in one occasion. Men tend to binge drink more than women: 40% of the male population against 17% of the female population. In the Northeast of Brazil, excessive weekly or daily use of alcohol corresponds to 30% of the number of participants while 24% reported having alcohol related problems. The biggest problems related to the use of alcohol are

physical, e.g. skipping meals while binge drinking, staying under the influence for several consecutive days; social, such as relapsing after promising themselves that they were not going to drink anymore; work related, with the possibility of losing their jobs; family problems, due to the fact that the family is usually bothered by the binge drinking; and violence related problems, as when individuals engage in arguments or initiate fights with a non-family member while drinking[1].Thus, the excessive use of alcohol might affect one's quality of life, whether individually or socially. Individually means that when consumed in large amounts, alcohol affects the individual's mental and physical health, causing diseases, for example, in the liver, stomach and depression. In regards to society it can cause problems in the work place, in the legal sphere or some violent episode.Dependency affects the lifestyle of an alcoholic profoundly, due to the effects of both intoxication and abstinence. Despite the improper use of alcohol being one of the main causes of death, few studies have been conducted investigating the quality of life of patients who are alcohol dependent until the present moment[2].

Quality of life is related to knowledge, experiences and values, whether they are individual or collective, in different periods in time. Thus, professionals from various fields of knowledge need to understand it and contribute to its development, so that its assessment can guide the public system in regards to professionals making decisions[3].The II LENAD[4]discussed the relation between depresison and problems with alcohol consumption. It was show that the prevalence of depression is significantly higher between abusers of alcohol. That study also detected that 5% of Brazilians have tried to take their own lives. In 24% of thoses cases the attempted suicide was related to alcohol consumption. Thus, the severity of alcohol dependency and depression seem to negatively influence the perception of quality of life[5].The services that offer help need to be organized in a way that allows them to deal effectively with diagnosis and treatment in the physical sphere. The health care professional must be alert to all possible consequences and complications in order to better assist the patient. An approach centered around quality of life can offer them means of intervention.Besides the improvement of ways to intervene, prevention is necessary as an effective way to deal with the use and abuse of alcohol. Precaution should not be limited to isolated actions, but should be made in all fronts, emphasizing orientation and focusing on actions to reduce damage and promote rehabilitation and socialization between patients[6].

In that sense, it is important to understand quality of life through an instrument of measurement. In this study, the WHOQOL-bref[7] will be utilized, for being an instrument the demands less time to be filled out and for having good psicometric characteristics. Such instrument is composed of 26 questions, 2 of which are about self-evaluation of quality of life and 24 questions represent each facet of the complete instrument (WHOQOL-100), physical, psycological, environment and social relations.

The objective of the present study is to evaluate the quality of life among women who consume alcohol excessively, so that the results will serve as tools for decision making in the Secretary of Health in the three levels of public administration.

## II.     METHOD

The  study is transversal, with a quantitive approach and its objective is to evaluate the quality of life of alcohol users.The study was conducted in conformity with all National Health Counsil's ethical principals of research envolving humans, and approved by the Ethics Committee of the Federal University of Paraíba CAAE: 39399814.6.0000.5188.The WHOQOL-bref[7], the scale chosen to evaluate quality of life, was initially developed with 100 questions (WHOQOL-100) and its development involved the participation of several countries, representing different cultures. Brazil also has a validated version[8]. As an attempt to minimize time and costs of research and still obtain satisfactory psicometric characteristics, the WHO in association with the Quality of Life Group, has developed an abbreviated version of WHOQOL-100, the WHOQOL-bref. The instrument is composed of 26 questions, 2 of which are general questions about quality of life. The other questions represent each of the 24 facets present in the original questionnaire, which is composed by four domains: physical, psychological, social relations and environment. The answers are all based on a *likert*scale (1 through 5) in which the higher the score, the better quality of life. It is necessary to recode questions 3, 4 and 26, in the following way: (1=5), (2=4), (3=3), (4=2), (5=1).An average score on the *likert* scale is calculated for the first and second questions. For each domain the value of each interview is added and the average is calculated as following:

Domais 1: (Questions 3 + 4 + 10 + 15 + 16 + 17 + 18)/7
Domain 2: (Questions 5 + 6 + 7 + 11+ 19 + 26)/6
Domain 3: (Questions 20 + 21 + 22)/3
Domain 4: (Questions 8 + 9 + 12 + 13 + 14 + 23 + 24 + 25)/8

For the results, if the *likert*average varies between 1 and 2,9 it is understood that the individual needs to improve quality of life; if it varies between 3 and 3,9 the quality of life is regular; from 4 to 4,9 the quality of life is considered good; and, for an average of 5 on the scale, the quality of life is considered to be very good.

# III.     RESULTS AND DISCUSSION

The instrument was structured in two parts, one containing the approach to socialdemographic (age, education, religion, types of drugs consumed, frequency of participation in support group meetings), and the other related to the quality of life through the WHOLQOL-bref scale (physical and psychological domains, social relations and environment).The results were obtained based on information from 36 alcoholic women, who sought treatment at CAPSad III– David Capistrano da Costa Filho, the Centro POP, a specialized reference center for the homeless   and the Specializes Service in Soacial Approach (Ruartes), in João Pessoa/Paraíba/Brasil, wich are treatment and support centers for people with addiction to alcohol or other drugs. From De Boni, Bertoni, Bastos, Bastos[9]when describing  the profile of alcohol users in Rio de Janeiro found 343 individuals, 305 of which were eligible for the study, 256 men and 49 women, an amount close to the one found in this study.

The data showed that most women (55,6%) are between 19 and 42 years old. The women were classified in 5 categories according to their education: uneducated, did not finish primary school, finished primary school, did not finish secondary school, finished secondary school, did not finish college, finished college. Since none of the women had college education, that category was not used in the analysis. Approximately 38,9% of the participants claimed to have not completed primary school and 19,4% claimed to have finished secondary school. Futhermore, 16,7% had not completed secondary school and the same percentage claimed to be uneducated, and only 8,3% completed primary school. According to PNUD[10], in the state of Paraíba, 36,1% of the women who use alcohol excessively are between 18 and 39 years old and about 14% were uneducated and/or had not finished primary school. That corroborates with the highest percentage in women between 19 and 32 and between 33 and 42, as well as with the highest percentage of uneducated women seen in this study.

The Almeida[11]study also confirmed the prevalence of low education levels among drug users. Among the people treated in CAPSad in João Pessoa, 88,23% had low education levels, 4,11% were uneducated and 71,53% had only completed primary school.

As for religion, the following categories were defined: catholic, protestant, spiritism, religions of african descent, others and none. None of the women claimed to belong to spiritism, religions of African descent or other religions. Among the named categories, 50% of the women said to be catholic, 30,6% said not to have a religion and 19,4% said to be protestants.

All the patients studied use alcohol. In addition to that, 69,4% said to also use marijuana and tobacco, 41,7% use crack cocaine and antidepressants ad 30,6% use cocaine and inhalants. Those numbers help to demonstrate that drug addiction can begin with alcohol abuse, which is usually consumed since adolescence and may be the pathway to other drugs. Most women's (55,5%) do not attend any kind of support group for chemical dependents. The use of alcohol was confirmed in the study of Almeida[11], that found that 79,46% of patients studied used alcohol, both isolated or combined with other drugs. Said study tried to verify factors associated with the abandonment of treatment for chemical dependency in the city of João Pessoa, and it concluded that the use of crack cocaine and especially of alcohol are great contributors for abandoning treatment.

A research published in *Scientific Reports*, compared risks of mortality among users of alcohol, nicotine, marijuana, cocaine and other substances. Alcohol was considered a drug of very high risk for life being morelethal than marijuana 144 times. It was also considered the most dangerous drug individually followed by heroin, cocain, tobacco, ecstasy, methanphetamine and marijuana.The percentage of women that claimed to attend support groups every 6 months was 30,6%. Around 11,1% of women attend such groups every month and 2,8% do it sporadically. As a consequence, providing adequate treatment for theses women becomes a great challenge.The WHOLQOL-bref[7]scale was the chosen instrument to evaluate the quality of life of alcoholin women. As mentioned, the abbreviated version used for the study is composed of four domains: physical, psychological, social relations and environment. Those domains are subdivided in facets. The physical domain (DOM1) corresponds to the facets related to pain and discomfort, energy and fatigue, sleep and rest, mobility, daily activities, dependency on medication or treatments, ability to work. The psychological domain (DOM2) is related to positive feelings, thinking, learning, memory and concentration, self-esteem, body image and appearance, negative feelings and personal spirituality/religion/beliefs. The social relations domain (DOM3) involves personal relations, social support and sexual activities. Finally, the environment domain (DOM4) involves physical safety and protection, home environment, financial resources, health care and social care: availability and quality, opportunityto acquire new information and abilities, participation in and opportunities of recreation/leisure, physical environment and transport. Fig. 1 presents the facets related to the four domains.
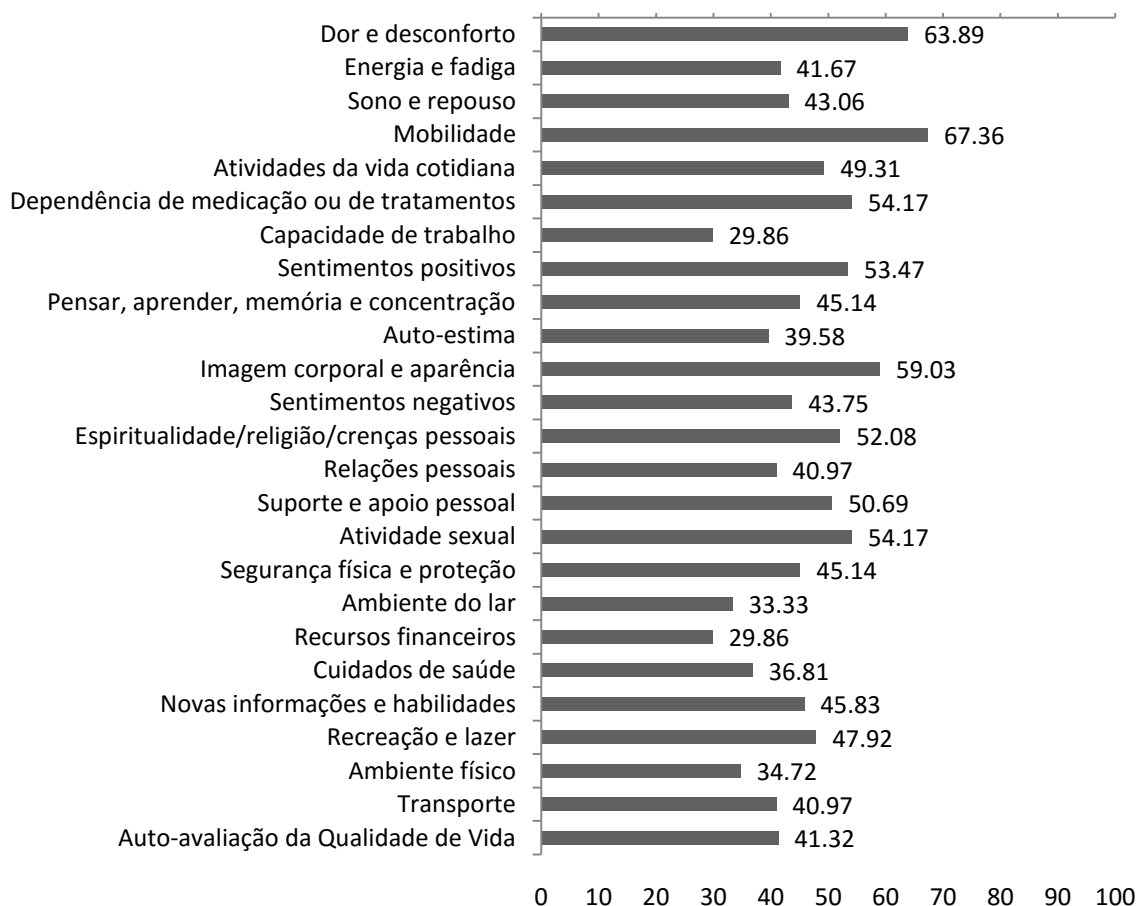
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**Figure. 1:** facets related to domains: physical, psychological, social relations and environment
**Table1:** Descriptive statistics of the Quality of Life domainsof women who consume alcohol excessively in João Pessoa-PB, 2015.

| DOMAIN | AVARAGE | STANDARD DEVIATION | COEFFICIENT OF VARIATION | MINIMUM VALUE | MAXIMUM VALUE | AMPLITUDE |
|---|---|---|---|---|---|---|
| Physical | 11,98 | 2,42 | 20,18 | 7,43 | 17,71 | 10,29 |
| Psychological | 11,81 | 2,49 | 21,10 | 4,67 | 16,67 | 12,00 |
| Social Relations | 11,78 | 3,64 | 30,91 | 4,00 | 18,67 | 14,67 |
| Environment | 10,29 | 2,75 | 26,72 | 4,00 | 19,00 | 15,00 |
| Self Avaluation of Quality of Life | 10,61 | 3,57 | 33,66 | 4,00 | 20,00 | 16,00 |
| TOTAL | 11,29 | 1,96 | 17,32 | 6,00 | 16,15 | 10,15 |

According to Table 1, the general average of domains is 11,29. The average represents where there is a larger concentration of data in an area, in this case the physical domain. The standard deviation gives the idea of dispersion of data in relation to the average. The domain with the smaller standard deviation was the physical, followed by the psychological, environment and social relations. It is also observed that the self-evaluation of quality of life has an average of 10,61 and standard deviation of 3,57, indicating that the data is disperse, as can be seen in Graph 2. In regards to the coefficient of variation, the smaller it is, the more uniform are the data. Therefore, the coefficient of variationis higher for the social relations domain and for the self-evaluation of quality of life.
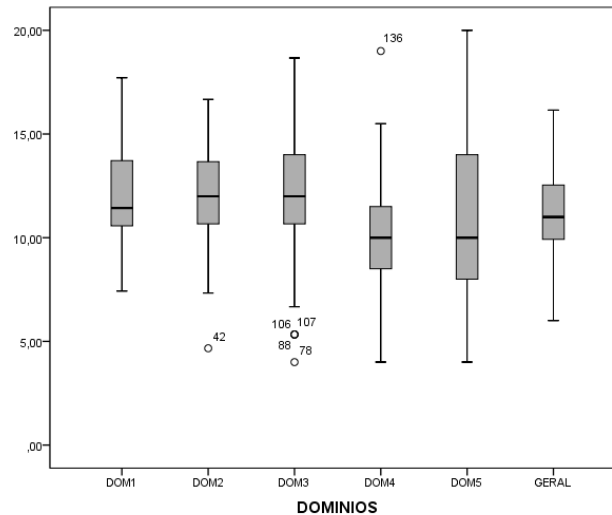
**Figure. 2:** Evaluation scores of domains WHOQOL-bref

The evaluation scores of the four domains e of the two questions of self-evaluation in the test are summarized in Fig. 2.In order to verify if there is a difference between the domains, a variance analysis was made and, should there be, the test of multiple comparisons will be conducted, to determine in which groups there was a difference. For such a test, it is necessary to analyze if the domains can be considered as derived from a normal population. Therefore, the normality test of Shapiro-Wilk was conducted to verify the non-rejection of the hypothesis. (Table 2).

**Table2:** Normality Tests of Shapiro-Wilk

| Domains | Statistics | Degrees of Freedom | P-value |
|---|---|---|---|
| Physical | 0,967 | 36 | 0,347 |
| Psychological | 0,970 | 36 | 0,431 |
| Social Relations | 0,937 | 36 | 0,040 |
| Environment | 0,955 | 36 | 0,153 |
| Self-evaluation of quality of life | 0,952 | 36 | 0,122 |
| Total | 0,970 | 36 | 0,432 |

The analysis of p-values presented in Table 3, gives us evidence not to reject the normality hypothesis of the scores of the domains, except for the domains of social relationsThe results of the variance analysis are described in Table3.

**Table3:** Analysis of Variance of the Domains of Quality of Life

| Scores x Domains | Sum of Squares | Degrees of Freedom | Avarage aquere | Z | P-value |
|---|---|---|---|---|---|
| Between groups (combined) | 88,292 | 5 | 17,658 | 2,142 | 0,062 |
| Within groups | 1731,288 | 210 | 8,244 | | |
| Total | 1819,581 | 215 | | | |

The p-value of the ANOVA table supplies evidence that the hypothesis of equality between averages should not be rejected, because p-value = 0,062 >α = 0,05. Therefore, domain have equal behaviors when it comes to scores.Since there was no evidence of significant statistic difference between domains it was not necessary to do tests of multiple comparisons.Fig. 3 presents the percentages determined in each domain. It is observed that the physical domain is responsible for 49,9%, followed by psychological (48,84%), social relations (48,61%) and environment (39,32%).
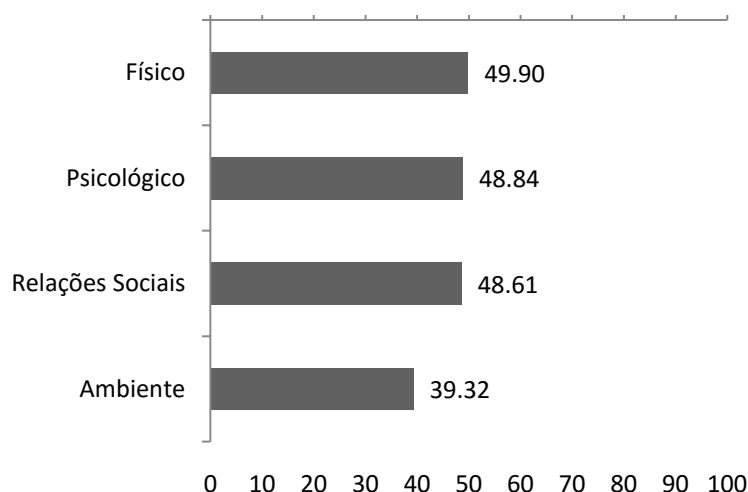
**Figure. 3:** Domains of Quality of Life

The data show that the quality of life in women who use alcohol excessively is low, especially when it comes to the fourth domain, the environment, which has the most vulnerable aspect and interferes the most in the quality of life of the patients studied. Several women reported living on the streets or areas of the city with extreme poverty indexes and that tends to worsen their situation. The physical domain was the highest, which shows that women have fewer problems related to their body, pain, exhaustion and daily life. That indicates that the physical aspect was satisfactory in that population, demonstrating to be a favorable point for quality of life in general.Almeida[11]concluded that the use of alcohol and crack cocaine are associated with the abandonment of treatment. And, due to the highly addictive potential, crack users adhere less to treatment and suffer constant relapses. He registered that the consumption of alcohol was present in 46,10% of patients, followed by crack cocaine and marijuana, 44,4% e 5,8%, respectively.The excessive use of alcohol was also studied by Oliveira, Dell'Agnolob, Ballani, Carvalho, Pelloso[12] in women that were patients in a Teaching Hospital in Northwest of Paraná, in the years of 1999 to 2008, where it was concluded that the use of distilled beverages were predominant and its ingestion was more frequentduring the night. Futhermore, 18,96% needed hospitalization and 8,5% evaded the hospital.As for internal consistency, the instrument also obtained satisfactory values, reachining Cronbach alfa coheficients of 0,91 to all 26 questions of the questionnaire and 0,84, 0,79, 0,69 e 0,71, respectively, in the physical, psychological, social relations and environment domains[13].

## IV.        FINAL CONSIDERATIONS

The excessive use of alcohol can cause social, personal and health related problems. Several people sought help in specific treatment centers for the use of alcohol and drugs, such as CAPSad III, the POP Center and Ruartes, seeking to be free of addiction. However, abstinence crises can lead to slips and relapses, affecting the quality of life of individuals who abuse alcohol. The present study chose to study women, seeing as that class is even more stigmatized.This study paid due attention to the multitude of problems that come from the excessive use of alcohol to expose the complexity of the issue, both to society and authorities, as well as to provide the government with the necessary information to make decisions to support not only women, but all who need help to treat addiction. With that in mind, it is clear that support centers are indispensable tools in the treatment of addiction.

## REFERENCES

[1]     Secretaria Nacional Antidrogas(BR). *I Levantamento nacional sobre os padrões de consumo de álcool na população brasileira (I LENAD).* 2007[acesso em 20out 2015]. Disponível em: http://bvsms.saude.gov.br/bvs/publicacoes/relatorio_padroes_consumo_alcool.pdf.
[2]     Payá R, Figlie NB, Janaina LT, Ronaldo L. *Como é a Qualidade de Vida dos Dependentes de Álcool?.*[Acesso em 20 dez 2015]. Disponível em: http://uniad.org.br/desenvolvimento/images/ stories/publicacoes/science/Qualidade%20de%20vida.pdf.
[3]     Siqueira SMF. *O questionário genérico SF-36 como instrumento de mensuração da qualidade de vida relacionado a saúde de pacientes hipertensos.* 2005. 112f. Tese (Escola de enfermagem de Ribeirão Preto). Universidade de São Paulo, Ribeirão Preto.

[4]     Secretaria Nacional Antidrogas(BR). *II Levantamento nacional sobre os padrões de consumo de álcool na população brasileira (II LENAD).* 2014 [acesso em 20 out2015]. Disponível em: http://inpad.org.br/wp-content/uploads/2014/03/Lenad-II-Relat%C3%B3rio.pdf.

[5]     DAEPPEM JB, KRIEG MA, BURNAND B, YERSIN B. *Mos-SF-36 in evaluating healthrelated quality of life in alcohol-dependent patients.*Am J Drug Alcohol Abuse, 1998 Nov;24(4):685-94.

[6]     Cavalcante MBPT, Alves MDS, Barroso MGT.*Adolescência, álcool e drogas: uma revisão na perspectiva da promoção da saúde. Esc. Anna Nery, vol.12, no.3, Rio de Janeiro. Sept. 2008.*

[7]     THE WHOQOL GROUP (EUA).*The development of the World Health Organization quality of life assessment instrument (the WHOQOL).* In: Orley J, Kuyken W editors. *Quality of life assessment: international perspectives*. Heidelberg: Springer Verlag, 1994. p. 41-60.

[8]     Pedroso B, Pilatti LA, Gutierrez GL, Picinin CT. *Cálculo dos escores e estatística descritiva do WHOQOL-bref através do Microsoft Excel.* Revista Brasileira de Qualidade de Vida.v.2. n.1, p.31-36,jan./jun./2010.

[9]     De Boni RB, Bertoni N, Bastos LS, Bastos FI. *Unrecorded alcohol in Rio de Janeiro: Assessing its misusers through Respondent Driven Sampling.*Drug and Alcohol Dependence, 139 (2014) 169-173.

[10]   *Programa das Nações Unidas – PNUD (BR).* Atlas De Desenvolvimento Humano No Brasil. 2013 [acesso em 24 dez 2015] Disponível em: http://www.atlasbrasil.org.br/2013/pt/download/.

[11]   Almeida R. A. *Fatores associados ao abandono do tratamento por usuários do Centro de Atenção Psicossocial Álcool e outras Drogas em João Pessoa.* 2013. 119 f. Dissertação (Programa de Pós-Graduação em Modelos de Decisão e Saúde) - Universidade Federal da Paraíba, João Pessoa - PB.

[12]   [Oliveira GC, Dell'Agnolob CM, Ballani TSL, Carvalho MDB, Pelloso SM. *Consumo excessivo de álcool em mulheres.* Rev Gaúcha Enferm., Porto Alegre(RS),33(2):60-68,jun./2012

[13]   Fleck MPA. *O instrumento de avaliação de qualidade de vida da Organização Mundial da Saúde (WHOQOL-100)):características e perspectivas.* Ciênc. saúde coletiva [online]. 2000, *vol.5, n.1*, pp.33-38.