

Knowledge of Alcoholic Liver Cirrhosis in Male aged 14 to 30 Years in a Colony of Tulancingo, Hidalgo, Mexico

ARISTA DURÁN DIANA IVONNE¹ and RUVALCABA LEDEZMA JESÚS CARLOS^{2*}

¹Student of Medical Degree. (ICSa-UAEH) Institute of Health Sciences, University of the State of Hidalgo. Pachuca Hidalgo, Mexico.

^{2*}Full time Research Professor in Academic Area of Medicine (ICSa-UAEH) Institute of Health Sciences, University of the State of Hidalgo. Pachuca Hidalgo, Mexico.

<http://dx.doi.org/10.13005/bpj/529>

(Received: July 20, 2014; accepted: September 06, 2014)

ABSTRACT

Liver cirrhosis is a chronic disease characterized by the progressive replacement of functional liver cells; it can be caused by chronic viral diseases and excessive alcohol consumption. Determine the level of knowledge about alcoholic liver cirrhosis in male aged 14 to 30 years and thus to stimulate the creation of prevention programs to reduce its incidence. Methodology. During July-December 2013 a cross-sectional study was conducted to 45 in male aged 14 to 30 years in Colony San Nicolás el Chico Tulancingo, Hidalgo, obtained by a systematic method with a reliability of 95%, a prevalence of 3% (0.03) and an error of 5% (.05). Results. The 71% are female. The most common level of education was high school with 42%. Socioeconomic status was commonly middle class 89%. The population information obtained mainly from the media by 67%. The 80% has had no cases in their family and 67% had never seen a patient with alcoholic liver cirrhosis. 76% of the population does not have adequate knowledge of the disease. Conclusion. The level of knowledge was low, people were grouped into appropriate knowledge of the topic also consume alcohol. No access to information, most of the people obtained of the media.

Key words: knowledge, liver cirrhosis, alcoholism, prevention.

INTRODUCTION

The liver, the second largest organ of the human body after the skin, with an approximate weight of 1,500 grams, meets very important functions for the body. Some of them are the protein manufacture, removal and neutralization of toxic substances in the blood, store and release glucose when it is necessary, and the production of bile which helps the absorption of fat and fat-soluble vitamins. If there is no operation of this organ by pathological factors all these processes are hampered [1, 2].

Such is the case of hepatic cirrhosis, chronic progressive disease characterized by replacement of liver functional tissue by scar tissue. This is one of the main health problems in the world, the main causes are viral chronic disease and the excessive consumption of alcohol. Alcoholic cirrhosis of the liver is what it is called when it is the last of the causes listed above. Alcohol is the most widespread toxin in the world, the source of 65% of the cirrhosis diagnosed, although there is greater incidence in men with a ratio of 2.5 to 1 in and in women these values are approaching the same [3,4,5].

Alcoholic liver cirrhosis occurs when alcohol consumption ranges between 40 and 80 g/day in men and sometimes lower in women, these values are approximate, may also occur when consumption is not daily but is greater. When drinking alcohol in moderation we cause serious alterations in the metabolism of fats, resulting in fatty liver or hepatic steatosis, if it is not controlled by starvation of alcohol then this leads to cirrhosis[6].

Alcoholic liver cirrhosis is characterized by two phases, the first so-called phase offset, because that is usually asymptomatic and the second, the Decompensated phase, where all the complications beginning with the rise of pressure portal, varices, ascites, peritonitis, among the most important for the calculation of survival are manifested. In the compensated phase is up to 12 years, while the second is only 2 to 5 years. This damage leads to the appearance of liver failure, increases the pressure of the System Portal and produces the ascites. If in moderate alcohol consumption continues urea absorption is compromised, they increase the levels of ammonia which subsequently causes a hepatic encephalopathy, picture clinical which includes a variety of neuro-psychological disorders, particularly in areas cognitive, emotional, personality, motor activity, memory and consciousness, and may result in coma[2,7,8,9,].

Table A. Operational definition of variables

| Variable | Definition |
|------------------------|--|
| Age | Variable age of numeric type, measured in years. |
| Sex | Variable categorical type, differentiation of gender (<i>male/female</i>) |
| Education | Variable of categorical type, current level (<i>none, primary, secondary, Bachelor's degree, technical degree not acquired at Bachelor, Bachelor's degree or engineering</i>). |
| Socioeconomic level | Categorical type variable socioeconomic level (<i>low, medium, high</i>). |
| Level of knowledge | Variable level of categorical type, referring to the amount of information that the individual has the disease (<i>adequate, inadequate</i>). |
| Source of information | Categorical variable. It identified where knowledge was obtained (<i>media, literature, experiences, prevention campaigns, educational institutions</i>). |
| Cases in the family | Categorical variable. Identification of the disease by observation (<i>Yes, No</i>). |
| Cases in the community | Categorical variable. Identification of the disease by observation (<i>Yes, No</i>). |

AIM. Determine the level of knowledge about alcoholic liver cirrhosis in male aged 14 to 30 years and thus to stimulate the creation of prevention programs to reduce its incidence.

Symptoms and frequent signs of alcoholic liver cirrhosis include ascites and varices (hemorrhagic or bloodless) (weight gain, bloating, feeling of heaviness, feeling of satiety, changes in the navel, indigestion, nausea or vomiting, hemorrhoids, swollen ankles, in some cases dyspnea and hydrothorax liver when the ascites fluid is mass) [10,11,12,13].

Many people of Mexico are known for their excessive consumption of alcohol, especially at an early age, Tulancingo is no exception. It is difficult for people who do not interact with the health sciences to be informed of the impact of alcohol on your body.

Alcohol use is very frequent in this town and very few people know the consequences, so it is necessary that there is more information on this topic. Liver cirrhosis is the cause of 27,000 deaths annually, of which 65% are linked to bad habits and to the immoderate consumption of alcohol. It is necessary to increase the levels of knowledge of the population about this disease, but first we have to recognize the current level and on the basis of the obtained results encourage the development of campaigns against the abuse of alcohol[4].

MATERIAL AND METHODS

It was a type of descriptive observational study of transverse character 45 young people aged

14 to 30 of the Colonia San Nicolas del boy in Tulancingo de Bravo, Hidalgo. In the period July-December of 2013, obtained by a systematic method, with a reliability of 95%, a prevalence of 3% (0.03) and an error of 5% (0.05).

Variables and measuring scales were the following: A database in Microsoft Excel, was a descriptive statistical analysis for numerical and categorical variables, frequencies and bivariate in SPSS-17 analysis were obtained.

Table. 1: Education Level

| Category | Frequency. | % |
|------------------|------------|----|
| None | 2 | 4 |
| Primary | 4 | 9 |
| High school | 19 | 42 |
| Bachelor | 13 | 29 |
| Technical career | 3 | 7 |
| Primary degree | 4 | 9 |

Source: Direct. Survey young people aged 14 to 30 years in a colony of Tulancingo, Hidalgo, 2014

Table. 3: Información Media

| Category | Frequency. | % |
|------------|------------|----|
| Mass media | 30 | 67 |
| Literature | 3 | 7 |
| Experience | 7 | 15 |
| None | 5 | 11 |

Source: Direct. Survey young people aged 14 to 30 years in a colony of Tulancingo, Hidalgo, 2014

Table. 5: Cases In Their Community

| Category | Frequency. | % |
|----------|------------|----|
| Yes | 15 | 33 |
| No | 30 | 67 |

Source: Direct. Survey young people aged 14 to 30 years in a colony of Tulancingo, Hidalgo, 2014

RESULTS

The study of transverse type carried out in the period July-November of 2013 in the Colonia San Nicolás el Chico, municipality of Tulancingo de Bravo in the State of Hidalgo was performed in an age range of 14-30 years, resulting in the 23 years of age. With respect to sex, 29% of the population surveyed was male and 71% female.

The grade was more frequent in high school with 42%, followed by Bachelor in 29%, 9%, primary degree 9%, 7% and none 4% technical career (Table 1).

Table. 2: Socio-economic Level

| Category | Frequency. | % |
|--------------|------------|----|
| Upper class | 41 | 2 |
| Middle class | 40 | 89 |
| Low | 4 | 9 |

Source: Direct. Survey young people aged 14 to 30 years in a colony of Tulancingo, Hidalgo, 2014

Table. 4: Cases In The Family

| Category | Frequency. | % |
|----------|------------|----|
| Yes | 9 | 20 |
| No | 36 | 80 |

Source: Direct. Survey young people aged 14 to 30 years in a colony of Tulancingo, Hidalgo, 2014

Table. 6: Knowledge Level

| Category | Frequency. | % |
|---------------|------------|----|
| Appropriate | 11 | 24 |
| Inappropriate | 34 | 76 |

Source: Direct. Survey young people aged 14 to 30 years in a colony of Tulancingo, Hidalgo, 2014

In relation to the socio-economic level of respondents obtained 2% belonged to the upper class, 89% middle class and low 9% (Table 2).

The population obtained the information from the following sources: 67% of media, 7% of literature or in any institution of education, 5% by experience and 11% have no access to any information (Table 3).

As for the cases witnessed they were divided into two categories, cases in the family 20% of the population have or had a sick person in their family and 80% not (Table 4).

Table. 7: Relationship Level Of Knowledge And The Level Of Studies

| Category | | Frequency. | % |
|---------------|------------------|------------|----|
| Appropriate | None | 0 | 0 |
| | Primary | 0 | 0 |
| | High School | 6 | 13 |
| | Bachelor | 3 | 7 |
| | Technical Career | 2 | 4 |
| Inappropriate | Primary Degree | 0 | 0 |
| | None | 2 | 4 |
| | Primary | 4 | 9 |
| | High School | 13 | 30 |
| | Bachelor | 10 | 22 |
| | Technical Career | 1 | 2 |
| | Primary Degree | 4 | 9 |

Source: Direct. Survey Young People Aged 14 To 30 Years In A Colony Of Tulancingo, Hidalgo, 2014

As for the second category 33% of respondents if they noted any cases in their community and 67% had never seen a patient with alcoholic hepatic cirrhosis (Table 5).

Only 24% of the population has a knowledge suitable on alcoholic liver cirrhosis, the other 76% do not this was deducted through an analysis, which was assessed on each of the surveys under the same criterion of punctuation (Table 6).

It was confirmed that educational level also has a very important relationship with the level of knowledge about the disease (Table 7).

Analysis bivariate between gender and the level of knowledge (Table 8) was carried out resulting in that probability that there is more knowledge among women 0,63 ($p > 0,05$).

Analyzed the relationship between the level of knowledge of alcoholic liver cirrhosis in respondents and if cases were observed in their families (Table 9).

Showing there 1.96 probability that greater knowledge if there are cases in the family ($p > 0,05$). Also unfortunately detected that it is 5.6 times more likely that people know the disease if there are cases in their community (Table 10) ($p < 0,05$).

Analyzed the relationship between the level of knowledge of alcoholic liver cirrhosis and media 15% points out as appropriate and generally correspond to middle class (Table 11 and 12).

Table. 8: Relationship Between The Level Of Knowledge And Gender

| Category | Frequency. | % |
|--|------------|----|
| Women with adequate level of knowledge | 7 | 15 |
| Women with inadequate level of knowledge | 25 | 56 |
| Men with adequate level of knowledge | 4 | 9 |
| Men with inadequate level of knowledge | 9 | 20 |

Source: Direct. Survey young people aged 14 to 30 years in a colony of Tulancingo, Hidalgo, 2014

DISCUSSION

Identified that 24% of the population has adequate knowledge that the literature refers to having only 3%. According to the literature the average age of alcohol consumption was 55±11 in women and men, 44±11 years. Perhaps this influenced the percentage of knowledge that the population about alcoholic liver cirrhosis, since young people studied were from 14 to 30 years therefore the access to information is easier thanks to the technology, factors such as the use of the computer, cellular and especially for easy internet access.

Another important fact that could modify the incidence of adequate knowledge is that

applied surveys of alcohol consumption is very common in the colony, in a family of 5 people about 2 consume alcohol, therefore there are more cases found of this disease, which as noted in research knowledge becomes more frequent if there are cases in the community and in the family.

As mentioned above 20% of the population have or had a sick person in the family, and 33% of respondents if they noted some cases in their community, therefore it is clear that the frequency of the disease is more common than had been thought, which makes the existence of a good knowledge 1.96 and 5.6 times more likely respectively.

Table. 9: Relationship Between The Level Of Knowledge And Cases In The Family

| Category | Frequency. | % | |
|--------------------|------------|----|----|
| Knowledge Adequate | Cases Yes | 5 | 11 |
| | No | 6 | 13 |
| Inadequate | Yes | 4 | 9 |
| | No | 30 | 67 |

Source: Direct. Survey Young People Aged 14 To 30 Years In A Colony Of Tulancingo, Hidalgo, 2014

Table. 11: Relationship Between The Level Of Knowledge And The Media

| Category | Frequency. | % | |
|--------------------|------------------|----|----|
| Knowledge Adequate | Media Mass Media | 7 | 15 |
| | Literature | 0 | 0 |
| | Experience | 0 | 0 |
| | None | 4 | 9 |
| Inadequate | Mass Media | 23 | 51 |
| | Literature | 3 | 7 |
| | Experience | 3 | 7 |
| | None | 5 | 11 |

Source: Direct. Survey Young People Aged 14 To 30 Years In A Colony Of Tulancingo, Hidalgo, 2014

Table. 10: Relationship Level Of Knowledge And Known Cases

| Category | Frequency. | % | |
|--------------------|------------|----|----|
| Knowledge Adequate | Casos Yes | 7 | 15 |
| | No | 4 | 9 |
| Inadequate | Yes | 8 | 18 |
| | No | 26 | 58 |

Source: Direct. Survey Young People Aged 14 To 30 Years In A Colony Of Tulancingo, Hidalgo, 2014

Table. 12: Relationship Between Level Of Knowledge And The Socio-economic Status

| Category | Frequency. | % | |
|--------------------|----------------------------------|----|----|
| Knowledge Adequate | Socio-economic Level Upper Class | 0 | 0 |
| | Middle Classe | 10 | 22 |
| | Low | 1 | 2 |
| Inadequate | Upper Class | 1 | 2 |
| | Middle Classe | 30 | 67 |
| | Low | 3 | 7 |

Source: Direct. Survey Young People Aged 14 To 30 Years In A Colony Of Tulancingo, Hidalgo, 2014

Despite being a rural community only 4% does not have any school level and was more frequent high school with 42% this also turns out to be of great importance, since according to the literature, 25% of the female population and 7.3% of the men were illiterate.

Suggestions and recommendations.

The development of information campaigns on the consequences of alcoholism, graphics and innovative, the creation of logos of sensory impact, with broadcast media, in the community, especially in health institutions and institutions of education (from elementary), undoubtedly would decrease mortality caused by this disease.

Part of the solution lies in the creation of free psychological help centers and easy access. For three main reasons:

1. Early onset in alcohol consumption.
 2. Persons with depression and psychological problems are more likely to consume alcohol.
 3. Major cause of family breakdown.
- "Information is the first step to prevention"

CONCLUSION

Today it is common to hear about diseases, chronic degenerative related to bad habits, but alcoholism and its complications is a

forgotten issue and will increase. Ignorance of this issue constitutes one of the major risk factors. It is really a not only public health problem but also a social problem. The older triggers are psychological problems, the example in children, fun makes a mistake and customs. It is alarming that only 24% of the population have adequate knowledge, when 40% consume alcohol currently (70% of men and 28% of the women surveyed consume alcohol).

The level of knowledge was scarce, even people who were grouped on adequate knowledge of the subject consume alcohol, however it was high from what is intended, which is very satisfying.

In large part to only a percentage has access to information and above all access to technology, most said to get it from the media and no one sadly said he obtained it from the sectors of health and education institutions, this makes clear that the work has not been enough by these.

ACKNOWLEDGEMENTS

The authors of the present research article would like to acknowledge and truly thank the collaboration of Yesenia Elizabeth Ruvalcaba Cobián, for her contributions on the revision and translation of the article; situation which allows the possibility to increase the transferring and modification of scientific knowledge.

REFERENCES

1. Stevens Alan, S. Lowe James, human histology. Third Edition, Madrid Spain, Elsevier, 2006.
2. Garcia ox I., et. To the. "Diseases of the digestive tract: liver cirrhosis" *Rev. Elsevier Medicine Actualization*, **11**, 625-633
3. Mercè Prats, "Cirrhosis" *Rev. Pharmacy professional*, **27**(5), 45-51 (2013).
4. Ampollo Octavio, et. To the. "Epidemiological characteristics of liver cirrhosis at the Hospital Civil de Guadalajara" *Rev. Public health of Mexico*, **39**, no. 3, May-June, pp. 195-200 (1997).
5. Bolet Astoviza, Miriam, Socarrás Suárez María Matilde. "Alcoholism, consequences, and prevention" *Rev. Cubana Invest Bioméd*, **22**(1), pp. 25-31 (2003).
6. Cáceres Alvarez Lebanon, Osorio Pagola mark Felix, Maple Núñez Merlyn. "Alterations histomorphological liver in a group of alcoholic patients" *Rev. Electronics of the medical sciences in Cienfuegos, Medisur*; **8**(5); (2010).
7. Rangel Armando, Mauricio Cruz, "Update on cirrhosis, natural history of cirrhosis" *Rev. Pain*, VIII, no. 6 (2009).
8. Toledo Claudio, "liver cirrhosis: preventive measures of some of its complications" *Rev. Medical Clin. CONDES Chile*, **21**(5), pp. 757-763 (2010).

8. Jiménez Block Enriqueta, et. To the. "Complications liver cirrhosis", *Rev. Medical portals*, 2012, S/U.
9. Solís Muñoz Pablo Jaime, et. To the. "Digestive and general surgery, 3rd Edition, Madrid, AMIR, 2008, pp." 21-28.
10. Libán Álvarez Caceres, Osorio Pagola Marcos Félix, Maple Núñez Merlyn, "alterations histomorphological liver in a group of alcoholic patients" *Rev. Electronics of the medical sciences in Cienfuegos, Medisur*; 8(5), pp. 47-51 (2010).
11. Sanchez Tapias J.M., "Hepatitis", *Gastroenterology and hepatology, Rev. Tried to practice medicine, Medicine, Mexico*, 5, pp. 43-58 (1985).
12. Aguilar J. Emeritus Queen of the Andalusian health service. "Hepatic encephalopathy" *Rev. Medicine. Sevilla. Spain*. 11(11), pp.652-9 (2012).