

# Protocol for assessing alcohol withdrawal syndrome by nursing professionals in emergency services: a pilot test\*

Protocolo para avaliação da síndrome de abstinência alcoólica por profissionais de enfermagem nos serviços de urgência: teste piloto

Protocolo para evaluación del síndrome de abstinencia alcohólica por profesionales de enfermería en los servicios de emergencias: test piloto

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#### ABSTRACT

**Objectives:** This work speaks of a pilot test administered in four public services with emergency care (one at a hospital and three at community clinics) in the city of Ribeirão Preto, São Paulo, to test an assessment protocol for Alcohol Withdrawal Syndrome. Involved were auxiliaries, technicians and soon-to-be-nurses. The object was to evaluate the protocol's potential as a guide to nursing care, and to test whether it was adequate in terms of comprehension and applicability. **Methods:** A protocol based on the Clinical Institute Withdrawal Assessment was constructed to be applied by nursing professionals in hospitals and community clinics, allowing for possible alterations based upon individual patients. Fifty-nine workers tested the protocol over four months. **Results:** Sixty-eight patients (21 women and 47 men), with average age between 34 and 40 years, were interviewed. Alcohol was the predominant drug of use (90%) on a daily average between both sexes. The protocol was designed to systematize health care. Among its purposes were: to facilitate care (42.4%); provide a script for faster orientation (30.5%); provide information giving professional updates (25.4%); provide explanations regarding the particular sickness (23.7). **Conclusions:** The experience was positive, identifying a lack of knowledge about Alcohol Withdrawal Syndrome. However, an interest to learn more on the subject became evident among workers. **Keywords:** Alcoholism/nursing; Substance withdrawal syndrome; Nursing care

#### **RESUMO**

Objetivos: Relatar a experiência piloto em quatro serviços públicos com pronto-atendimento (um hospitalar e três comunitários) na cidade de Ribeirão Preto-São Paulo, para testar um protocolo de avaliação da Síndrome de Abstinência Alcoólica entre os auxiliares, técnicos e eventuais enfermeiros, e avaliar o potencial do formulário como guia norteador do cuidado de enfermagem, bem como a adequação do mesmo em termos de compreensão e aplicabilidade. Métodos: Construiu-se, um protocolo para ser aplicado por profissionais de enfermagem, baseado no Clinical Institute Withdrawal Assessment e na vivência em serviços hospitalar e comunitário, contendo alterações que o paciente apresenta. Cinquenta e nove funcionários testaram o protocolo durante quatro meses. Resultados: Sessenta e oito pacientes (21 mulheres e 47 homens), com idade média entre 34 e 40 anos, foram entrevistados e o álcool predominou como droga de uso (90%) num padrão diário em ambos os sexos. O protocolo colabora na sistematização da assistência, facilitando o cuidado (42,4%), como roteiro de orientação (30,5%) e atualização profissional pelas informações (25,4%) e explicações sobre doença (23,7). Conclusões: A experiência positiva identificou a carência de conhecimentos relativos à Síndrome de Abstinência Alcoólica, porém, evidenciou o interesse desses trabalhadores em aprender. Descritores: Alcoolismo/enfermagem; Síndrome de abstinência a substâncias; Cuidados de enfermagem

#### **RESUMEN**

Objetivos: Relatar la experiencia piloto en cuatro servicios públicos con servicios de emergencia (uno hospitalario y tres comunitarios) en la ciudad de Ribeirão Preto-Sao Paulo, para probar un protocolo de evaluación del Síndrome de Abstinencia Alcohólica entre los auxiliares, técnicos y eventuales enfermeros, y evaluar el potencial del formulario como guía orientadora del cuidado de enfermería, asi como la adecuación del mismo en términos de comprensión y aplicabilidad. Métodos: Se construyó, un protocolo para ser aplicado por profesionales de enfermería, basado en el Clinical Institute Withdrawal Assessment y en la vivencia en servicios hospitalarios y comunitarios, conteniendo alteraciones que el paciente presenta. Cincuenta y nueve funcionarios testaron el protocolo durante cuatro meses. Resultados: Sesenta y ocho pacientes (21 mujeres y 47 hombres), con edad promedio entre 34 y 40 años, fueron entrevistados y el alcohol predominó como droga de uso (90%) en un patrón diario en ambos sexos. El protocolo colabora en la sistematización de la asistencia, facilitando el cuidado (42,4%), como guía de orientación (30,5%) y actualización profesional por las informaciones (25,4%) y explicaciones sobre enfermedad (23,7). Conclusiones: La experiencia positiva permitió identificar la carencia de conocimientos relativos al Síndrome de Abstinencia Alcohólica, sin embargo, reflejó el interés de esos trabajadores para aprender. Descriptores: Alcoholismo/enfermería; Síndrome de abstinencia a sustancias; Cuidados de enfermería

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<sup>\*</sup> Study carried out in four services with emergency treatment (one at a hospital and three at community clinics), city Ribeirão Preto (SP), Brazil.

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#### INTRODUCTION

Alcohol abuse is a behavior that promotes the unraveling of various problems affecting the health of the individual, relationships with others and society in general, and, more specifically, it encourages dependency. These constitute a condition that may be faced over a long continuum, beginning with harmful use, then progressing in the direction of dependency with various levels of severity.

Formally known as alcoholism, despite having been substituted in the 9th revision of the International Classification of Diseases by Alcohol Dependency <sup>(1)</sup>, alcohol dependency is not a disease that fits into the mold of medical models. There are indeed debates questioning such framing<sup>(2)</sup>. The fact is that it does not constitute a definitive statistical event in absolute terms. It is a disturbance that evolves over the course of a lifetime.

This is a problem targeting 10% to 12% of the world population, affecting individuals of various age groups and of both sexes, though data indicates a greater prevalence among males<sup>(3-4)</sup>. According to public data, in 2000 alcoholism was in 5<sup>th</sup> place, contributing to 4.0% of the total diseases. The same source foresaw that it would move to the top of the list in subsequent years. Despite consumption levels of alcohol having dropped in developed countries, it augmented in countries of the former Soviet Union and in developing nations<sup>(3)</sup>.

Within Brazil, a domestic study was realized by the Brazilian Center of Information on Psychotropic Drugs (CEBRID)<sup>(5)</sup> in 107 cities with more than 200,000 inhabitants (representing 27.7% of the total country). The study demonstrated a prevalence of alcohol use of 11.2% (17.1% among men and 5.7% among women). In the North and Northeast, prevalence was noted above 16%. Aggravation of use is identified at 5.2%, the point at which it is labeled alcohol dependency. Affected within these regions are adolescents between 12 and 17 years of age, causing the index to settle at approximately 9% (5).

For many individuals with significant degree of dependency, after being affected on a physical level, a set of organic and psychic symptoms may appear, characterized by the term Alcohol Withdrawal Syndrome. These are revealed after cessation or reduction in consumption of alcohol, or even after having such a significant tolerance level that the organism can no longer consume sufficient doses to avoid abstinence<sup>(6)</sup>.

Most dependents (70% to 90%) present a withdrawal syndrome of light and moderate levels, which are characterized by episodes of chronic headaches, nausea, visual sensitivity, light trembling of extremities, as well as insomnia, agitation and psychomotor unrest. Some

(5%) will confront a severe withdrawal syndrome with the exacerbation of the above symptoms, aggravated by disturbances in sensory perception and including the appearance of convulsions (3% of cases). This picture characterizes Delirium Tremens, a severe condition whose mortality rate varies among 1% and 5% (7-9). Withdrawal syndrome is self-limited and lasts an average of 7 to 10 days, its symptoms surging generally between 24 and 36 hours. This period may vary anywhere between 6 and 72 hours (8,10-11).

In the United States, it is estimated that just 10% to 20% of patients with Alcohol Withdrawal Syndrome are hospitalized to receive care, considering that there is a great number of North Americans living in this situations each year without receiving specific care. This is ironic since within the United States there exists the greatest group of studies on psychoactive substances<sup>(10)</sup>.

In Ribeirão Preto, state of São Paulo, studies on alcohol use were initiated with an epidemiologic investigation<sup>(12)</sup> realized in the 1960s. It revealed that alcoholism was responsible for 13% of hospitalization from a total of 18,410 admitted. In the last year of the study (1962), a prevalence was indicated of 17% and 10% for males and females respectively, in the category of excessive drinking, and 13.6% for pathological male drinkers.

Posterior studies realized in the 1990s in the sector of emergency psychiatric hospital care for regional treatment of medical emergencies, demonstrated that 20% of patients treated in the period between 1988 and 1990 had diagnoses related to alcohol use, predominantly Alcohol Withdrawal Syndrome<sup>(13-14)</sup>.

Subsequent work dealing with the years 1988 to 1993 evidenced that of a total of 12,573 cases, 41.2% were related to alcohol with 30.5% of these indicating comorbidity with psychiatric and or clinical upheaval. It was further verified that of 3,977 patients with diagnoses related to alcohol use, 49.7% indicated Alcohol Withdrawal Syndrome and 37% indicated alcoholic psychosis<sup>(15)</sup>. Other studies of the same area related to the 1990s, circumscribed to smaller periods (months), proposed to characterize the population attended<sup>(16-17)</sup>. They identified Alcohol Withdrawal Syndrome among the predominant diagnoses (33%).

Studies realized in the city of Ribeirão Preto, though they do not lend themselves to comparison owed to different methodical procedures (area, population, sampling among others), revealed an elevated occurrence of cases related to alcohol, principally in emergencies. This remains constant throughout the decades. This research evidenced Alcohol Withdrawal Syndrome with the priority that may be repeated in other services of emergency treatment.

In Brazil, public studies were not encountered dealing

with emergency treatment of patients or emergency care (in hospital) with diagnoses related to alcohol use. Yet based on citations, although having limitations, it was perceived that Alcohol Withdrawal Syndrome remains a condition attended to with greater frequency by medical teams and nurses.

Data only indicates the gravity of the situation, as well as a necessity to devise strategies to minimize, prevent and treat problems owed to alcohol abuse. It lies in the hands principally of health care professionals to investigate the suggestive indications of these problems in all clients under their responsibility, for a precocious diagnosis leads to a better prognosis.

Regarding the impact of alcohol on population morbidity and mortality, nursing professionals continue receiving little or no information or training in questions related to alcohol use. This could be among the factors leading the nurse to deal with the issue at a lower priority level<sup>(18-20)</sup>. However, since the late 1990s, there has been a movement among academics and professionals in the direction of emphasizing the theme of alcohol and drugs. This movement has been motivated by influence of scientific associations, such as the Brazilian Association for the Study of Alcohol and Other Drugs, and political bodies of the Brazilian government. Furthermore, encouragement has also been given by the development of programs and projects supported by agencies associated with the federal government (National Antidrug Secretary, Ministry of Health), and by an international organization - Inter-American Commission for the Control of Drug Abuse (ICCDA), Organization of the United States (OUS). Such effort was meant for research development and the formation of human

The state of ignorance and unpreparedness is not exclusive to nurses<sup>(20)</sup>. However, the nurse and medical team remain in service the longest and therefore may serve are "bridges", promoting bonds between the many professionals and patients. They may obtain a greater appreciation of their work and experience greater professional growth, including in the area of emergency services.

Generally, in the reality of nursing personnel, and specifically in a service of this nature, a question emerges, especially since they are the first to receive these patients, before or after medical screening. How prepared is this group to attend to patients abusing alcohol?

In this context, the object of this present work is to report a pilot experience in four public services with emergency treatment (one in a hospital and three at community clinics) in the city of Ribeirão Preto, to test a protocol evaluating Alcohol Withdrawal Syndrome (AWS) among nursing auxiliaries and technicians. A further objective was to evaluate the potential of this

form as a guide to nursing care and to test its comprehension and applicability.

#### **METHODS**

The instrument used (evaluation protocol for AWS) was based on the revised scale of the Clinical Institute for the Withdrawal Assessment of Alcohol, which serves to orient the evaluation as well as the gravity of AWS. It also assesses the need to administer medications<sup>(21)</sup>, along with assessing signs and symptoms of withdrawal syndrome and Delirium Tremens. Noted were general characteristics of patients, drugs used and their consumption, and any additional information about partners. Questions were raised referring to the contribution of the protocol in relation to the systematization of nursing assistance. The protocol also served to update nursing personnel on alcohol abuse and daily use of psychoactive substances.

First, the research project, of which this is an ample part, was directed to the Committee of Ethical Research of the Clinics Hospital, Faculty of Medicine at Ribeirão Preto, University of São Paulo. Approval of the project allowed for the development of this project, the realization of the test pilot, and its definitive application for the evaluation of AWS. All of those who participated in the research signed a Terms of Free and Clarified Consent Form.

The research took place during the four months of November 2005 to February 2006 in four services with emergency treatment (one at a hospital and three at community clinics). A sample of 59 workers willing to participate was gathered. Of these, 52 were nursing auxiliaries, four were nurses, and three were nursing technicians. Health care workers pertaining to these three tiers of nursing were oriented to properly use the protocol and reminded of the importance of participation. Over the months during which research was conducted, diverse visits were made to the sites at different times to help with the application to patients of this instrument. In total, the protocol was applied to 68 patients (21 women and 47 men): 23 diagnosed with AWS, 39 with AWS and alcohol intoxication, and 9 with alcohol intoxication.

Subsequently, the completed protocols were separated by location (hospital or community clinic). They were further separated by substances used, frequency of use, and by gender of patients, the end of which was to better characterize those attended to. The second phase of analysis was qualitative, including a reading of worker responses to identify parts that indicate the protocol's potential in the systematization of nursing assistance, and to locate other possible items on the daily use of alcohol and psychoactive substances.

A thematic analysis<sup>(22)</sup> permitted the grouping of all materials.

It became clear that in terms of content there were no significant differences between those protocols answered by nurses, technicians or nursing auxiliaries. Therefore, groupings of data were made and tables were elaborated to clearly present values and frequency of occurrence.

#### **RESULTS**

In hospital emergency care (Table 1), 23 patients were attended to by hospital workers participating in this study, of which 10 (42.5%) were women with average age of 33 years, and 13 (56.5%) were men with average age of 40 years. The drug most consumed in this group was alcohol, striking 70% of the women and 100% of the men, appearing in isolated use or in conjunction with marijuana (two men), cocaine (one woman) and crack (two men). The abuse of medication was also found among females, occurring in three cases. The informed daily standard consumption of alcohol (in association or not with other psychoactive substances) was 50% for women and 53.9% for men. Among this sample, 30.5% of women and 15% of men reported attempting suicide.

In the service of emergency care in community clinics

(Table 2), the sample of patients consisted of 45 individuals; 11 (24.4%) women with average age of 34 years, and 34 (75.6%) men with average age of 38 years. In this group, alcohol also appeared as the predominant drug, consumed by 100% of the women and men attended to. There was association with other drugs as well: marijuana (one case), crack (one case). Both were cases involving men. Daily use was reported by 54.5% of women and 58.8% of men. Consumption amounts varied from six cups to a liter among women, and three/four cups to a liter among men. Those having already attempted suicide were 36.4% of women (four cases) and 29.4% of men (ten cases).

Beyond service users not having been the principle objective of this work, they were essential in providing a character profile revealing the context of care in which the nursing team functions. Patient data utilized in the protocol showed that the average age of both genders was similar in hospital and community clinics. However, it was verified that more men were attended to (75.6%) than women in community clinics, while in hospital there was minimal difference (56.5% men and 42.5% women). The average daily use reported was 52.8% among all those attended to. Service in the community clinic was distinguished with 61.8% of men attended to with this related use. It was also observed that the rate of suicide attempts among females was very close (30.5% at

**Table 1** – Characterization of patients treated by means of protocol to evaluate AWS, such as substance used, frequency of use and gender: Emergency Treatment at Hospital

| Substance                        | Frequency of Use | Men |       | Women |       |
|----------------------------------|------------------|-----|-------|-------|-------|
|                                  |                  | nº  | %     | nº    | %     |
| Medications (BZD, clorpromazine) | Non Applicable   | -   | -     | 3     | 30,0  |
| Alcohol                          | Non Applicable   | 3   | 23,1  | 2     | 20,0  |
|                                  | Daily            | 6   | 46,2  | 4     | 40,0  |
| Alcohol and Cocaine              | Daily (alcohol)  | -   | -     | 1     | 10,0  |
| Alcohol and Crack                | Non Applicable   | 2   | 15,3  | -     | -     |
| Alcohol and Marijuana            | Daily            | 1   | 7,7   | -     | -     |
|                                  | Daily (alcohol)  | 1   | 7,7   | -     | -     |
| Total                            |                  | 13  | 100,0 | 10    | 100,0 |

Note: Only one woman related the daily consumption of 0.5 liters of alcohol.

**Table 2** - Characterization of patients treated by means of protocol to evaluate AWS, such as substance used, frequency of use and gender: Emergency Treatment at Community Clinics

| Substance             | Frequency of Use | Men |       | Women |       |
|-----------------------|------------------|-----|-------|-------|-------|
|                       | riequency of Ose | nº  | %     | nº    | %     |
| Alcohol               | Daily            | 20  | 58,8  | 6     | 54,5  |
|                       | Not Applicable   | 10  | 29,4  | 4     | 36,4  |
|                       | 3 times / week   | -   | -     | 1     | 9,1   |
|                       | 4 times / week   | 2   | 5,9   | -     | -     |
| Alcohol and Marijuana | Daily            | 1   | 2,9   | -     | -     |
| Alcohol and Crack     | Not Applicable   | 1   | 2,9   | -     | -     |
| Total                 |                  | 34  | 100,0 | 11    | 100,0 |

Note: The daily consumption among men who relayed information varied from 3 or 4 cups or 5 cans of beer to one liter ("pinga"). Daily consumption among women was between 6 cups (beer) and one liter (pinga).

hospital and 37% at community clinics). Among men, it was almost two times greater at community clinics (29%) compared to hospital (15%). As for the consumption of medications without prescriptions, it was only reported at emergency treatment in the hospital for three women.

With respect to protocol evaluation, workers identified its useful potential in systemizing nursing assistance (Table 3). The theme "to care" is worthy of note, for 42.4% described the "facilitation or contribution to care". Anther 30.5% considered the protocol as a guiding script for professional attention, which would aid in better knowing the patient, thus defining a guiding profile for observation and perception. Furthermore, 16.9% responded positively regarding the protocol's potential. For two workers (3,4%) the protocol helped to improve their impression of patients and the way they treated them for alcoholism.

Also revealed were the opinions of participants on the protocol's potential for professional development (Table 4). It was observed that some responses were specific, even though 39% of the participants responded affirmatively without being too specific. Patients responded on items pertaining to the use of a script (meant to reveal signs and symptoms), such as "provide

information that would help during care" and "help during care", only 25.4% and 23.7% respectively. It is noted that 8.4% gave suggestions about how to summarize the protocol. They also suggested that this protocol, which identified Alcohol Withdrawal Syndrome, should also be accompanied by a protocol of interventions.

#### **DISCUSSION**

Studies produced by the area of nursing, directly or indirectly approaching the theme of alcohol and other drugs, increased considerably since 2000. Among them were included central perceptions, opinions and attitudes of nurses and students of nursing on the use of alcohol and other psychoactive drugs, users and related sicknesses<sup>(23)</sup>.

On specific information offered during the nursing graduate course, a study done in the late 1990s<sup>(18)</sup>, revealed among other things that alcohol and drugs were not topics of priority in the formation of nurses. More recent investigations, evaluating the knowledge obtained by nursing graduates, showed that while receiving some specific content they still had difficulty establishing interpersonal relationships with dependents<sup>(24-25)</sup>.

Table 3 – Affirmation of responses on the protocol's potential to systematize nursing assistance

| Affirmation   |    | %    |
|---|----|------|
| Facilitates or contributes to nursing care (helps identify necessities, problems, clarifies signs and symptoms)   | 25 | 42,4 |
| Acts as a script which orients attention of the professional and helps to better know the patient (define profile, demonstrate characteristics and stages, observation guide, aid in perception). | 18 | 30,5 |
| Responded affirmatively without specifying  | 10 | 16,9 |
| Did not respond   | 4  | 6,8  |
| Helps to improve the vision one has of the patient ("improves my vision of the patient")  | 2  | 3,4  |
| Total   | 59 | 100  |

**Table 4** – Affirmation of responses on the protocol's potential as an aid in professional development

| Affirmation   |    | 0/0   |
|---|----|-------|
| Responded positively without specifying   | 23 | 39,0  |
| Supplies information on the subject which would help in the care of the patient   |    | 25,4  |
| Explains the sickness and its risks (by means of a script of signs and symptoms, stimulating the professional and prevents misguided or erroneous interpretations | 14 | 23,7  |
| Must be more summarized in the form of a check list   | 3  | 5,1   |
| Should be accompanied by a performance protocol   | 2  | 3,4   |
| Responded negatively or did not respond   | 2  | 3,4   |
| Total   | 59 | 100,0 |

Therefore, research on nursing education regarding the theme of psychoactive alcohol and drugs is far from being concluded.

Regarding investigations with the attempt to raise standards of students and nursing professionals, there seemed to be an omission on how to move them to a more superior level. This present work showed a lack of knowledge on chemical dependency.

With the protocol's application in locations more frequently attended by dependents and abusers of alcohol and other drugs, it emerged that these settings served as principle care services to patients with alcohol withdrawal syndrome and intoxication. Presentation of data on patients attended to with the aid of the protocol demonstrated the context in which these workers function, identifying the clientele that they receive and care for.

At these locations used to test the protocol, a disturbing index of alcohol use was revealed, principally among males. This data indicates the necessity to adequately prepare the group of nurses, not only for the sake of specific interventions, but to orient the population of patients as to clinical services for dependence and its consequences.

Regarding evaluation of the protocol by the sample of participants, it was perceived that 90% considered it to have positive potential to systematize assistance, principally to provide revealing information (signs, symptoms, difficulties). It would be a proper orienting guide in identifying needs and the attention of nurses. Along the same lines, the protocol was seen by 88.4% as an instrument with potential to aid in professional development. The content of the protocol explicitly revealed the sickness and stimulated personnel to seek more information. According to the above, the group managed to understand and apply the protocol within their working environment and further perceive it as an auxiliary instrument for nursing care.

#### **CONCLUSIONS**

Data from the sample of users to which the protocol

### REFERENCES

- Seibel SD. Álcool. In: Seibel SD, Toscano Jr A, editores. Dependência de drogas. São Paulo: Atheneu; 2000. cap. 5.
- Vaillant G. A História natural do alcoolismo revisitada. Porto Alegre: Artes Médicas; 1999.
- Organização Mundial da Saúde. Neuroscience of psychoactive substance use and dependence. Geneva: WHO; 2004. 264p.
- World Health Organization. Global status report on alcohol. Geneva: World Health Organization; 1999.
- Carlini EA, Galduróz JCF, Noto AR, Nappo SA. I Levantamento domiciliar sobre o uso de drogas psicotrópicas no Brasil: estudo envolvendo as 107 maiores

was applied confirm that alcohol users are encountered in community health care clinics as well as in specialized clinics. They exist at such proportions as to present problems of public health, such that nursing teams as well as specialized professionals in the area are frequently exposed.

Generally speaking, it was found that the protocol was welcomed as a useful instrument. The great majority of participants identified its positive aspects, especially as a script to identify the necessities of alcohol users as it provided information on possible signs and symptoms. It emerged as a useful instrument in treatment, directing the attention of auxiliaries to the manifestations to which they should be aware. Perhaps for this reason, two participants suggested that the protocol be accompanied by another for specific interventions. Apparently, the use of this second protocol would ensure the proper procedure for each case.

Based upon these findings, this study proved to be a valid and positive experience, since it identified a lack of knowledge related to manifestations of alcohol abuse, and particularly with those of Alcohol Withdrawal Syndrome. There was also evidence that the protocol was well received by health care workers as a learning tool to help incorporate specific information into their routines, and as a positive aid during the care of clients, which would consequently offer more qualified assistance. It may be inferred through records of participants that they would become more sensitized to the treatment of alcohol users. The protocol helped make them aware of the severe physical and psychic alterations that may occur without quick and effective treatment.

For the researchers, this experience provided important data regarding this protocol and on the group of workers for which it would be useful. Such information will be incorporated in the prioritization of the protocol and in the unfolding investigation of this project, toward which this work constitutes merely one step.

- cidades do país 2001. São Paulo: UNIFESP; 2002. 380p. 6. Bayard M, McIntyre J, Hill KR, Woodside J Jr. Alcohol withdrawal syndrome. Am Fam Physisian. 2004;
  - withdrawal syndrome. Am Fam Physisian. 2004; 69(6):1442,4-50. Shaw JM, Kolesar GS, Sellers EM, Kaplan HL, Sandor P.
- Shaw JM, Kolesar GS, Sellers EM, Kaplan HL, Sandor P. Development of optimal treatment tactics for alcohol withdrawal. I. Assessment and effectiveness of supportive care. J Clin Psychopharmacol. 1981; 1(6):382-7.
- 8. Trevisan LA, Boutros N, Petrakis IL, Krystal JH. Complications of alcohol withdrawal: pathophysiological insights. Alcohol Health Res World. 1998; 22(1):61-6.
- 9. Saitz R, Friedman LS, Mayo-Smith MF. Alcohol withdrawal:

- a nationwide survey of inpatient treatment practices. J Gen Intern Med. 1995; 10(9):479-87. Comment in: J Gen Intern Med. 1996; 11(5):315-6.
- Kozak LJ, Hall MJ, Owings MF. National Hospital Discharge Survey: 2000 annual summary with detailed diagnosis and procedure data. Vital Health Stat 13. 2002; (153): 1-194.
- 11. Moral M del. Fundamentos biopsicosociales del alcoholismo. Complicaciones psiquiátricas del abuso del alcohol. In: Lorenzo P, Ladero JM, Leza JC, Lizasoain I. Drogodependencias. 2a ed. Madrid: Editora Panamericana; 2003. Sección VIII. p.387-418.
- Noto AR, Galduróz JCF, Fonseca AM, Carlini CMA, Moura YG, Carlini EA. Levantamento nacional sobre uso de drogas entre crianças e adolescentes em situação de rua nas 27 capitais brasileiras - 2003. São Paulo: CEBRID; 2004.
- 13. Galduróz JCF, Noto AR, Fonseca AM, Carlini EA. V Levantamento nacional sobre o consumo de drogas psicotrópicas entre estudantes do ensino fundamental e médio da rede pública de ensino nas 27 capitais brasileiras: 2004. São Paulo: Centro Brasileiro de Informações sobre Drogas Psicotrópicas; Universidade Federal de São Paulo –UNIFESP; 2005.
- 14. Noto AR, Carlini EA. Internações hospitalares provocadas por drogas: análise de sete anos consecutivos (1987-1993). Rev ABP-APAL. 1995; 17(3): 107-14.
- Masur J, Capriglione MJ, Monteiro MG, Jorge MR. Detecção precoce do alcoolismo em clínica médica através do questionário CAGE: utilidades e limitações. J Bras Psiquiatr. 1985; 34(1):31-4.
- Mincis M. Doença hepática alcoólica: atualização 1992. Rev Hosp São Paulo Esc Paul Med. 1992; 4(1/4): 23-31.
- 17. Figlie NB, Pillon SC, Laranjeira RR, Dunn J. Audit identifica a necessidade de interconsulta específica para dependentes

- de álcool no hospital geral? J Bras Psiquiatr. 1997; 46(11) 589-93.
- Azoubel Neto D, Brasil IN, Herowitz J, Marconi J, Castro GA. Epidemiologia del alcoholismo en América Latina. Acta, Buenos Aires, 72-6, 1967.
- Luis MAV, Teixeira AMF, Oliveira ER. Atendimentos psiquiátricos em um setor de urgências psiquiátricas de um hospital geral no período de 1988-1993 na Região de Ribeirão Preto - SP. Rev Saúde Dist Fed. 1997; 8(3):17-31.
- Oliveira ER, Luis MAV. Distúrbios relacionados ao álcool em um setor de urgências psiquiátricas. Ribeirão Preto, Brasil (1988-1990). Cad Saúde Pública = Rep Public Health. 1996; 12(2): 171-9.
- Oliveira ER, Villar Luis MA. Distúrbios psiquiátricos relacionados ao álcool na região de Ribeirão Preto, São Paulo, Brasil no período de 1988-1993. Rev Saúde Dist Fed. 2002; 13(3/4): 47-62.
- 22. Yosetake LL, Pinheiro SN, Furtado EF. Co-ocorrências de Síndrome de Dependência ao álcool e outros diagnósticos psiquiátricos, pelos critérios do CID IX, em um serviço de emergência geral. Medicina (Ribeirão Preto). 1999; 32 Supl 1: 81-2.
- 23. Del-Ben CM, Marques JMA, Sponholz Júnior A, Zuardi AW. Políticas de saúde mental e mudanças na demanda de serviços de emergência. Rev Saúde Pública = J Public Health. 1999; 33(5): 470-6.
- Ramos LH, Pillon SC, Cavalcante MBG, Vilar Luiz M, Padredi FM, Laranjeira RR. O ensino sobre dependência química em cursos de graduação em enfermagem no Brasil - 1998. Acta Paul Enferm. 2001; 14(3): 35-43.
- 25. Lock CA, Kaner E, Lamont S, Bond S. A qualitative study of nurses' attitudes and practices regarding brief alcohol intervention in primary health care. J Adv Nurs. 2002; 39(4): 333-42.