

## Training of nursing teams for the attendance of the alcohol withdrawal syndrome: integrative review

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This study aimed to analyze evidence concerning the effectiveness of training strategies for nursing assistance teams related to alcohol withdrawal syndrome. Used as method, the integrative review, with key words indexed on the basis of information MEDLINE, LILACS, Bireme, SciELO, PubMed, Web of Science and CINAHL, without restrictions. The used descriptors are: "Alcohol withdrawal syndrome", "nursing" and "education". The trainings conducted with nursing teams were considered effective, reflecting positively on assistance. All studies included in their training scales as a way to evaluate the patients. The most frequently used are the scale Assessment Clinical Institute Withdrawal for Alcohol, Revised and the CAGE questionnaire. It is concluded that nursing professionals who work with the alcoholic withdrawal syndrome must receive training and updates on the topic.

Descriptors: Alcoholism; Alcohol Abstinence; Substance Withdrawal Syndrome; Nursing; Education.

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## Treinamento de equipes de enfermagem para assistência à síndrome de abstinência alcoólica: revisão integrativa

Este estudo teve como objetivo analisar evidências relativas à eficácia de estratégias de treinamentos para equipes de enfermagem assistenciais com temática relacionada à síndrome de abstinência alcoólica. Usou-se, como método, a revisão integrativa, com descritores indexados nas bases de informações MEDLINE, LILACS, Bireme, PubMed, SciELO, Web of Science e CINAHL, sem restrições de ano. Foram utilizados os descritores: “Síndrome de Abstinência Alcoólica”, “Enfermagem” e “Educação”. Os treinamentos realizados com equipes de enfermagem foram considerados eficazes, refletindo de forma positiva na assistência. Todos os estudos incluíram em seus treinamentos escalas como forma de avaliar os pacientes, sendo a escala Assessment Clinical Institute Withdrawal for Alcohol, Revised e o questionário CAGE os mais utilizados. Conclui-se que profissionais de enfermagem que trabalham com a síndrome de abstinência alcoólica precisam receber treinamentos e atualizações sobre o tema.

Descritores: Alcoolismo; Abstinência de Álcool; Síndrome de Abstinência a Substâncias; Enfermagem; Educação.

## Entrenamiento de equipos de enfermería para asistencia al síndrome de abstinencia alcohólica: revisión de integración

Este estudio tuvo como objetivo analizar evidencias relativas a la eficacia de estrategias de entrenamientos para equipos de enfermería asistenciales con temática relacionada al síndrome de abstinencia alcohólica. Se usó, como método, la revisión de integración, con descriptores indexados en las bases de informaciones MEDLINE, LILACS, Bireme, PubMed, SciELO, Web of Science e CINAHL, sin restricciones de año. Fueron utilizados los descriptores: “Síndrome de Abstinencia Alcoólica”, “Enfermería” y “Educación”. Los entrenamientos realizados con equipos de enfermería fueron considerados eficaces, reflejando de manera positiva en la asistencia. Todos los estudios incluyeron en sus entrenamientos escalas como manera de evaluar los pacientes, siendo la escala Assessment Clinical Institute Withdrawal for Alcohol, Revised y el cuestionario CAGE los más utilizados. Se concluye que profesionales de enfermería que trabajan con el síndrome de abstinencia alcohólica necesitan recibir entrenamientos y actualizaciones sobre el tema.

Descriptores: Alcoholismo; Abstinencia de Alcohol; Síndrome de Abstinencia a Sustancias; Enfermería; Educación.

## Introduction

According to the World Health Organization, 5.9% of all deaths worldwide are caused by alcohol, and the unbridled consumption of the drink can not only generate dependency, observed in 11.2% of cases, but can also lead to the development of 200 other diseases<sup>(1)</sup>. In Brazil, the distribution of alcohol-dependents ranges from 6.8 to 12.3%, depending on the criteria used for diagnosis of addiction<sup>(2-3)</sup>. Alcohol-related problems are responsible for a great impact on the population's health.

Emergency health services, identified that 24 to 31% of the users showed a harmful consumption of alcohol – the one that results in physical and mental damage or has social consequences. The attendance of traumatized users reaches to 50% of the patients<sup>(4)</sup>.

Taking into account that, when entering the service, the use of alcohol is stopped, there is high probability of progression to Alcoholic Withdrawal Syndrome (AWS) inside the hospital. The AWS is characterized by a set of signs acute symptoms, regarded as an indicator of the existence of dependency<sup>(5)</sup>.

The most common symptoms of AWS are tremors, gastrointestinal discomfort, anxiety, irritability, increased blood pressure, tachycardia and autonomic hyperactivity. Other less common symptoms, but more serious are seizures, hallucinations and *delirium*. Usually the symptoms start within 4 to 12 hours after stopping or reducing the use of alcohol. The intensity of the AWS reaches its peak on the second day and ends between four and five days<sup>(6)</sup>.

The withdrawal of alcohol without planning or systematization can endanger the health of patients, as well as the psychological and physical wellbeing of families and service teams. In addition, there is an increased risk of violent behavior<sup>(7)</sup>. Urgent and emergency services on health are equipped with nursing teams which are the front line of care of these users, therefore, should be prepared for this.

In view of the social representation of nurses regarding the assistance of alcohol and other drug users, it was noted that the design of these users based on moral models that bring an embedded concept of abnormality. This can affect the public service, as well as possible referrals to other types of available care, with a focus beyond the biological, like the Psychosocial Attention Centers<sup>(8)</sup> in a negative way.

Nurses who receive training to work with drug addicts, a bigger workload during graduation in disciplines that address alcohol and other drugs and graduate regardless of the area, demonstrate more positive attitudes to the alcohol user<sup>(9)</sup>. In Brazil, assisting nurses, teachers and graduate students from a general hospital went through an assessment in relation to their formal education and can see a deficit, with little or no knowledge about the topic of alcohol and its consequences<sup>(10)</sup>.

Considering the gravity and the high prevalence of the AWS calls for nursing teams, and the need for training of these professionals with regard to alcohol and the associated issues, strategies of professional training are necessary. This study aimed to analyze evidence concerning training strategies for nursing assistance teams related to the alcohol withdrawal syndrome.

## Methodology

The integrative review has the potential to develop conclusions of diverse perspectives in our clinical practice, thus forming a basis for the practice of nursing<sup>(11)</sup>. In this work we analyzed non-experimental and experimental studies. We used the following guiding questions: training for active nursing teams helps to bring positive results for patients with the alcohol withdrawal syndrome? What are the most effective training models?

A search was conducted in the following databases: MEDLINE and LILACS, through Bireme, SciELO, PubMed, *Web of Science* and CINAHL using the following descriptors and their combinations in Portuguese and English: "Alcohol withdrawal syndrome", "nursing" and "education". This search gave 744 results.

The inclusion criteria were: articles published in Portuguese, English and Spanish, without a limit regarding year of publication and full texts that answer guiding questions, 35 texts were selected. Within these selected texts, articles which provide *guidelines* of attendances to the alcoholic withdrawal syndrome that have not been applied as a form of training for the nursing staff, repeated articles or articles without full-text availability, resulting in a total of 9 items, as shown in table 1.

Table 1 - Selection of databases, publications and references from other publications, in accordance with the criteria established for this integrative review. Brazil, 2014

Database	Found	Pre-selected	Selected	Repeated	Included	Deleted
MEDLINE	327	26	5	5	-	-
LILACS	3	1	1	1	-	-
PubMed	258	20	8	1	5	2
SciELO	20	1	1	1	-	-
Web of Science	8	6	6	5	-	1
CINAHL	128	14	14	2	4	8
Total	744	68	35	15	9	11

## Results

Of the total number of articles found, 88.9% (8) are in the English language and one (P1) is in the Portuguese language, these data are presented in Figure 1. Moreover, 66.7% (6) of the countries

involved in this study was the United States, while other countries had 1 article for each: Brazil (P1), Australia (P3) and the United Kingdom (P5), and were published between the years 2000 and 2012, only one scientific journal was repeated (P6 and P9), the Clinical Nurse Specialist.

Study	Authors	Review	Year	Language	País
P1 <sup>(12)</sup>	Luis MAV, Lunetta ACF, Ferreira OS	Acta Paulista de Enfermagem	2008	Portuguese	Brazil
P2 <sup>(13)</sup>	Repper-DeLisi J, Stern TA, Mitchell M, et al.	Psychosomatics	2008	English	United States
P3 <sup>(14)</sup>	Daly M, Kermode S, Reilly D	Contemporary Nurse	2009	English	Australia
P4 <sup>(15)</sup>	McKay A, Koranda A, Axen D	Medsurg Nursing	2004	English	United States
P5 <sup>(7)</sup>	Benson G, McPherson A, Reid S	Nursing Times	2012	English	United Kingdom
P6 <sup>(16)</sup>	Phillips S, Haycock C, Boyle D	Clinical Nurse Specialist	2006	English	United States
P7 <sup>(17)</sup>	Stanley KM, Worrall CL, Lunsford SL	Journal of Addictions Nursing	2007	English	United States
P8 <sup>(18)</sup>	Schumacher LP, Ned J, Phillips M	Journal of Neuroscience Nursing	2000	English	United States
P9 <sup>(19)</sup>	Coffey R, Kulisek J, Tanda R, Chipps E	Clinical Nurse Specialist	2011	English	United States

Figure 1 - Characteristics of included studies in this review, according to the author, magazine published, year of publication, language and country of study. Brazil, 2014

All the studies aimed for the examination of how training, received by the nursing staff can influence patient care with the alcohol withdrawal syndrome. That is, the nursing teams received training with the alcoholic withdrawal syndrome, and after receiving the training, the influence of training was evaluated.

The P1, P5 and P6 used employees as variable to identify the effectiveness of the proposed intervention.

Staff who have received a specific type of training to meet AWS patients have received training. Already the P2, P3 and P9 used the chart to variable, in order to assess parameters of patients, conduct taken by professionals, among others.

In P4 and P8, considered the two main variables mentioned above, that is, verification of the effectiveness of the proposed training was made, both

through the satisfaction of employees with regard to this training as by examining medical records. In addition to these variables, the P7 used the patient and their family members who responded to a questionnaire.

The work had as objective to become incorporated in the assistance by means of staff training, a protocol for patient care with Alcohol Withdrawal Syndrome. These protocols were based on prior literature, however, with adaptations to the reality of each service as, for example, the convenience of handling the instrument, the time it takes to apply it and the cost of their maintenance.

In P6, a multidisciplinary team was formed as an instrument to improve the assistance of patients with AWS, which is the scale Severity Assessment Scale -SAS(16). The team opted for this scale rather than choosing for the Clinical Institute Withdrawal Assessment for Alcohol, Revised - CIWA-ar(20), which was considered as an alternative. After this choice by SAS, she still underwent adaptations before being implemented: the team modified items related to high blood pressure and hallucinations, adapting it to the service demand reality.

The CIWA-ar was used in 5 works (P1, P3, P4, P8 and P9) as an instrument to be applied within the established protocol. This is a gold standard scale, with 10 items, whose final score ranks the severity of AWS and provides subsidies for immediate intervention planning. Its application takes 2 to 5 minutes. The items in the range are: nausea and vomiting, tremors, sweating, anxiety, agitation, auditory disorders, tactile, visual disturbances, headaches and orientation in time and space.

The severity of the AWS has been classified and obtained by the score in the CIWA-ar scale, the higher the score, the greater the severity of the syndrome. The P5 and P6 does not use the CIWA-ar and the justification, according to the study, was that other scales are easier to apply, with objectives scores (P6) and that this scale classifies some symptoms as being a framework of AWS, however, these symptoms usually are present in other disorders, such as nausea and vomiting (P5).

Still, other 3 scales were included in different jobs, they are: AWS Type Indicator(21), Severity Assessment Scale - SAS(16) and the Glasgow Modified Alcohol Withdrawal Score - GMAWS(7). Below is a brief description of the use of these instruments.

The AWS Type Indicator is a tool that identifies patients at risk of developing AWS. It categorizes the symptoms in 3 types: symptoms of the central

nervous system activation, symptoms of adrenergic activity and delusional symptoms. Medical guidance is established according to the condition of the patient, that is, according to the types of symptoms and their severity.

Already the SAS, based on symptomatology changes which allows the organization of nursing care and guides doses and medications to be used on this patient, according to the symptoms classified on the scale.

And the GMAWS was created in the service in which the search was made. Before its implementation the nurses were using the CIWA-ar range in 8 different versions, resulting in an inconsistent management in various units and, in addition, was considered a complex scale, which occupied much of nursing staff. For this reason, a study group was set up at the hospital, where the GMAWS range was developed which, according to its results, assists the team in making decisions when faced with patients with AWS.

The way he conducted staff training was of interest in most jobs, both in order to increase the scientific knowledge of the professionals, regarding patient care of AWS, as training these professionals to correctly apply the protocols. The P3 had as one of the two forms of training to compare education and training of nursing staff, in patient care of AWS, in a hospital in Australia.

The first type of training was done by a learning module "autorun" with a teaching package for use by each professional, with study materials and books and testing of individual clinical skills, aiming at stimulating the autonomy of each professional in the planning and evaluation of education, focusing on problems and not on the content. The second type is called "training on the job", performed by permanent education in the hospital, which is based on a classical model of learning with a duration of 12 months, with lectures on the theme in 4 to 6 sessions. The results indicated that the two models have resulted in improvements in attendance; however, "autorun" received the highest score in all categories of the evaluation, with best results in skills and knowledge for the management of the patient with AWS.

## Discussion

Through the characterization of the sample, notice that the AWS has been little studied in Brazil, with minimal literature in the Portuguese language (11% - 1 work), which suggests new studies on this subject, and

that the country with the highest knowledge published on the topic is the USA (67%).

The only work done in Brazil on this subject, has highlighted that the formation of nurses, technicians and nursing assistants of alcohol and other drugs is insufficient. Therefore, the experience reported by professionals who have received the training, mostly on technical level, was that the Protocol served as an update on the subject, since they had little prior knowledge, and both stimulated assistance in the quest for more knowledge.

It has also been recognized (P7) that the professional preparation allows the nursing staff to provide better assistance to the AWS, referring to the fact that nurses specialized in dependent patients can manage and apply the CIWA-ar tool better than assistance nurses who work in sectors with sharpened patients.

In a qualitative study in Brazil, 16 nurses on technical level professionals were interviewed that work in Psychosocial Centers, specialized in serving users of alcohol and other drugs - CAPS AD. It was noted that one of the difficulties of insertion in the work routine of these services is the shortfall in job training to work with the chemical dependent, and that most of them established greater contact with the theme after they started working in the area<sup>(22)</sup>.

These data demonstrate that the reflection of the professionals on the AWS and its health care practice is influenced by the updated knowledge on the subject, so more studies on the AWS and models of theoretical-practical training for these professionals are needed.

The positive results of training of nurses to attend to the AWS can be observed also in the evolution of the patients. In P4, the implementation of CIWA-ar scale was associated with decreased incidence of delirium tremens. And, the P8, the training and the use of the Protocol for patient care in AWS were associated with reduced signs of severe withdrawal and administration of lorazepam.

## Conclusion

Nursing professionals who provide assistance to the AWS must receive theoretical and practical training and updates. The form of training of these professionals is little studied, and it is necessary to take into account the scenario of insertion of these professionals, their knowledge on the subject to be applied and the specificity of the patients to be served.

In addition, it is necessary to think of instruments for the development of didactic training, such as *slides*,

videos, case studies etc. The cost is an important factor to be taken into account. Patients at risk for developing the syndrome must be assessed using appropriate scales, adapting them to the reality of each workplace. New works need to be developed on this subject in order to reflect on assistance improvement alternatives.

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