INCIDENCIA DE ABUSO DE SUSTANCIAS EN PERSONAL DE SALUD A TRAVÉS DE APLICACIÓN DIGITAL DE ENCUESTAS

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ABSTRACT

This article aims to evaluate substance abuse in a sample of personnel who works in the Military Central Hospital through the digital application of two clini-metrical scales, the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) and the Alcohol Use Disorder Identification Test (AUDIT).

Keywords: Substance abuse, military, mental health, health staff.

RESUMEN

El presente artículo busca evaluar el abuso de sustancias por personal que trabaja en el Hospital Central Militar a través de la aplicación digital de dos escalas clini-métricas: la Prueba de detección de consumo de alcohol, tabaco y sustancias (ASSIST) y la Prueba de Identificación de Trastornos debidos al Consumo de Alcohol (AUDIT).

Palabras clave: Abuso de sustancias, ejército, salud mental, personal de salud.

INTRODUCCIÓN

Addiction is a term that is still used to describe dependence on a drug. However, ICD-10 (WHO) defines dependency syndrome as a group of physiological, behavioral and cognitive symptoms, in which the consumption of a drug or any kind of substance acquires higher priority than other regular behaviors.(1) One of the main characteristics of dependency syndrome is a strong desire (frequently overwhelming) of taking psychoactive drugs (without medical prescription) such as alcohol or tobacco.(1,2)

Objective

This article aims to evaluate substance consumption by military staff in the Military Central Hospital, by means of digitally applying the ASSIST and AUDIT scales presented to the personnel over the digital platform SurveyMonkey®.

Background

In Mexico, substance abuse is one of the most challenging issues in mental health, whose consequences have social, health, economic and political repercussions.(1) At once, it poses one of the greatest public health problems, the consequences of which have also repercussions in social, health, economic and political spheres. (1,2) At national level, it has been sought to highlight the decisive participation of consuming substances such as alcohol, tobacco and other drugs in the development of diseases and conditions that compromise personal integrity and damage the health of the population.(4) Owing to this, various periodic evaluations have been carried out to estimate the trend of substance use by different age groups in the Mexican population.(2–4)

In our country there is an increase in the prevalence of consuming drugs at least one time in life. The National Survey on Drug, Alcohol and Tobacco Consumption 2016-2017, assessed the prevalences and main variations of drug use by the population aged between 12 and 65 years across the 32 states, it was concluded that only in 2016 there was a significant increase of 10.3% in consumption of drugs and substances at some time in life, with respect to the last 5 years prior to the survey, being the age group from 18 to 34 years the most significant.(2) In Mexico, the panorama of addictions shows an important problem regarding the prevalence of the use of substances such as alcohol, tobacco and illicit drugs. In this context, the Armed Forces are not exempt from such problems, though it can be expected that because of discipline and training, prevalence and consumption rates for members of the Mexican Army and Air Force are lower than those for the general population. In any case, due to the characteristics of the military population, the possibility of using, consuming and abusing drugs, alcohol and tobacco cannot be ruled out, given that in the missions carried out, contact with drugs is continuous and most of the military in operating activities is at the high-risk period, i.e., 18-34 years of age. Owing to this, it is fundamental to constantly assess substance consumption in the armed forces.

In Chile, for example, drug use detection tests were carried out between November 11 and December 31, 2019; 1,153 tests were carried out, of which 40 were positive. This implies that in that period, just after Army troops took to the streets to protect public order, 3.46% of the military measured would have consumed some type of drug, which implies a significant increase that corresponds to 9.9% over 2018.(5)

MATERIALS AND METHODS

The scales used were selected because of the degree of international reliability and endorsement by the Department of Mental Health of World Health Organization (WHO), as they are considered the most appropriate for the characteristics of military personnel of the Mexican Army and Air Force.

Alcohol, Smoking and Substance Involvement Screening Test (ASSIST)

ASSIST was developed by WHO in 2011,(6) primarily to detect drug use, though it can also be used to detect alcohol and tobacco use, especially in settings where consumption is high.(6,7)

The test detects the use of all substances (tobacco, alcohol, cannabis, cocaine, amphetamine-type stimulants, sedatives, hallucinogens, inhalants, opiates and 'other' drugs), and produces a risk score ('low', 'moderate', or 'high') for each substance. It is made up of 8 questions: the first seven probe different aspects in relation to the consumption of 9 types of substances; question 8 probes intravenous use of some substances, and there is an additional question as a risk indicator. Each question has its value and when added together, they produce a score on which the respondents can find out their risk level when consuming these substances.(6)

Alcohol Use Disorders Identification Test (AUDIT)

AUDIT was also developed by WHO as a simple screening method for excessive alcohol consumption and as a brief assessment aid. It also provides a framework for intervention to help drinkers with harmful or risky consumption to reduce or cease alcohol consumption and thereby avoid the harmful consequences of its consumption.(8)

The questionnaire comprises 10 questions on recent use, symptoms of dependence and alcohol-related problems. For its use in the primary care setting, it offers several advantages such as a transnational standardization, as it is validated in 6 countries (Norway, Australia, Kenya, Bulgaria, Mexico and the United States of America); it mainly identifies risky and harmful consumption of alcohol according to the ICD-10 definitions of dependence and harmful use of alcohol; it is short, fast and flexible and focuses on recent consumption.(8)

AUDIT is easy to score. Each of the questions has a series of answers to choose from and each answer has a scoring scale from 0 to 4. Total scores equal to or greater than 8 are recommended as

indicators of risky and harmful consumption, as well as possible alcohol dependence; this way, the cut-off point is 8. In general, the higher the total score on AUDIT, the greater the sensitivity to detect people with alcohol dependence. A score equal to or greater than 1 in question 2 or question 3 indicates consumption at a risk level, a score above 0 in questions 4-6 implies the presence or the beginning of alcohol dependence.(9)

The points scored on questions 7 to 10 indicate that alcohol-related harm is already being experienced; scores between 8 and 15 are the most appropriate for simple advice focused on reducing risky consumption; scores between 16 and 19 suggest brief therapy and a continuous approach; whereas scores equal to or greater than 20 clearly require a more comprehensive diagnostic assessment of alcohol dependence.(9)

Method

Data were collected through a cross-sectional survey of personnel working at the Military Central Hospital. The survey retrospectively evaluated alcohol and substance use at some time in life and over the last three months, which made it possible to ascertain the incidence resorting to IBM SPSS Statistics 25® and identify risk groups for excessive consumption of alcohol and other substances in a sample of 1,432 users. The responses were scored and classified according to ASSIST and AUDIT scales, to subsequently perform a frequency analysis by groups of age, gender and hierarchies in personnel who according to the scales obtained risk scores.

Groups in the military sample with the highest levels of alcohol misuse were harmful drinking, AUDIT ≥ 16, alcohol dependence AUDIT ≥ 20, and binge drinking. While the rest were classified as low (0-10), moderate (11-25) and high-risk levels> 27 for risky alcohol consumption, and low (0-3), moderate (4-26) and high (> 27) for the consumption of other substances according to ASSIST.

RESULTS

A total of 1517 questionnaires was analyzed; after applying the inclusion and exclusion criteria already established, a sample of 1432 was obtained. The average age group was from 30 to 39 years (42-12%), showing a participation of 64.67% of women and 35.33% of men.

ASSIST scale results

The frequency analysis of the scores obtained for alcohol consumption in ASSIST test showed that most people have a low risk of alcohol consumption, while the incidence of alcohol consumption is 13.8%, (Table 1). Regarding the consumption of other substances, a higher frequency was obtained in people who present a low-risk consumption associated, while the incidence of consumption is 23.3% (Table 1).

The most consumed substance is alcohol, since 42.3% of the users has consumed it at some time in their life; it is followed by tobacco with 20%, which is the substance with the second highest prevalence of use. According to the results obtained on the ASSIST scale, 72.7% of users with high-risk consumption is a woman (Table 1).

For users with high-risk consumption of alcohol according to ASSIST, 66.3% correspond to troop classes in the military hierarchy (corporals and sergeants); 42 users have had a high risk of substance use over the last three months; 40.5% of the users are soldiers in the military hierarchy and alcohol is the most consumed substance (43.3%) (Table 2).

AUDIT Scale results

In zones I and II, we find users with low-risk consumption or in abstinence, as well as users with alcohol consumption over low-risk recommendations, which represent 99.9% of the sample and are the appropriate scores for intervention such as alcohol education or simple advice focused on reducing risky consumption. While users in zone IV require referral to the specialist for diagnostic evaluation and treatment. On the basis of the figures obtained according to age groups, the population with no consumption or with low-risk consumption is between 30 and 39 years of age (Table 3).

Table 1. ALCOHOL AT SOME TIME IN LIFE BY ASSIST.				
RISK	FREQUENCY	INCIDENCE	WOMEN	MEN
LOW	1235	86.2%	829 (67.1%)	406 (32.9%)
MODERATE	186	13%	102 (54.8%)	84 (45.2%)
HIGH	11	0.8%	8 (72.7)	3 (27.3)

Table 2. SUBSTANCE CONSUMPTION IN THE LAST 3 MONTHS BY ASSIST.

RISK	FREQUENCY	INCIDENCE	WOMEN	MEN
LOW	1098	76.6%	738 (67.2%)	360 (32.8%)
MODERATE	292	20.4%	170 (58.2)	122 (41.8)
HIGH	42	3%	27 (64.2%)	15 (35.8)

Table 3. RISK AREAS FOR ALCOHOL CONSUMPTION BY AUDIT.

		WOMEN		MEN	
RISK	FREQUENCY	FREQUENCY	100%	FREQUENCY	100%
ZONE I	1422	931	65.4%	491	34.6%
ZONE II	9	9	100%	0	0
ZONE III	0	0	0	0	0
ZONE IV	1	1	100%	0	0

DISCUSSION

The results allow us to conclude that a low percentage of our sample presents a significant risk of substance abuse, that is, from moderate to high risk (13.8%), which represents a significant comparison in relation to the incidence of consumption among the general population according to ENCODAT 2017 data.(1–3,10)

In addition, we found that non-commissioned officers, lower ranks, reserves and formerly serving personnel were more likely to report harmful drinking. These subgroups were also most likely to report 'binge drinking' at least monthly.

The importance of carrying out this study lies in the increase in the workload and assignments in the military institution since 2018, which has caused an erosion of human resources and also an impact on the family life of the troops.(11) This last group is the most affected as regards harmful use of alcohol.

We found that 17 people in the sample answered that they consume all the substances and also that their consumption was high and frequent and that it had repercussions in their daily life. It is important to monitor these individuals according to the military programs designed by the General Directorate of Military Health of the Ministry of National Defense. People detected by means of the application of the scales were reassessed and treated if needed by psychology and psychiatry specialists.(4,12)

In like manner, we observe a clear difference in the increase in consumption among women at least one time in their life in the sample assessed in comparison with reports by ENCODAT. The direct causes of this phenomenon are unknown. Nevertheless, in the sample the number of women that answered the survey is higher (935 out of 1432). Such may be an explanation for this phenomenon. Even though, it is important to correlate these results to other investigations conducted in the Mexican Army and Air Force, as there could be many other factors that explain the increase in substance abuse, mainly alcohol, in women.

The digital application of the scales gives the respondents some confidence because there is no direct interaction with an evaluator. Also, digital applications can improve the confidentiality of the user's personal information.

It is important to consider moderate-consumption figures, probably assessing people in a completely anonymous manner might improve the veracity of responses. We believe that if the respondents were able to have the option of answering anonymously when applying the surveys, the factors that make the interview responses not completely reliable may be eliminated, then the participants who seek to have changes in their behaviors of substance consumption could have the option to seek medical attention willingly, without the fear of legal repercussions.

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