ORIGINAL ARTICLE

REVISTA ENFERMAGEM ATUAL IN DERME

CONSUMPTION OF PSYCHOACTIVE SUBSTANCES BY MEDICAL PROFESSIONALS AT A HIGH COMPLEXITY HOSPITAL

CONSUMO DE SUSTANCIAS PSICOACTIVAS POR PROFESIONALES MÉDICOS EN UN HOSPITAL DE ALTA COMPLEJIDAD

CONSUMO DE SUBSTÂNCIAS PSICOATIVAS POR PROFISSIONAIS MÉDICOS DE UM HOSPITAL DE ALTA COMPLEXIDADE

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ABSTRACT

Aim: to analyze the consumption of psychoactive substances by physicians at a high complexity hospital in the state of Piauí. **Method:** cross-sectional study carried out with 90 professionals. Data collection took place between December 2018 and July 2019, through a semi -structured questionnaire, composed of sociodemographic, occupational and health -related variables and psychoactive substance consumption, as well the *Alcohol, Smoking and Substance Involvement Screening Test* and the *Alcohol Use Disorders Identification Test*. The data were analyzed using descriptive statistics, odds ratio, chi-square test and Pearson correlation test. **Results:** Among the most consumed psychoactive substances, the alcohol presented highlighted (94,0%). Among the illicit, we identified use of marijuana (97,6%) and inhalants (97,6%). Regarding the motivations for the consumption of psychoactive substances, recreational use (57,7%) and relaxation (26,6%) were more prevalent; as for the context, use for rest predominated (48.8%). In general, participants showed a low risk for the consumption of psychoactive substances. **Conclusion:** Identified risk behaviors direct attention to the demands of mental health care. Therefore, the need to strengthen the workers' health protection circle arises, focused on facing this problem.
Keywords: Physicians; Psychotropic Drugs; Substance Abuse, Oral; Occupational Health.

RESUMEN

Objetivo: analizar el consumo de sustancias psicoactivas por médicos de un hospital de alta complejidad en el estado de Piauí. **Método:** estudio transversal realizado con 90 profesionales. La recolección de datos se realizó entre diciembre de 2018 y julio de 2019, a través de un cuestionario semiestructurado, compuesto por variables sociodemográficas, laborales, de salud y consumo de psicotrópicos, además del Alcohol, Smoking and Substance Involvement Screening Test y el Alcohol Use Disorders Identification Test. Los datos fueron analizados mediante estadística descriptiva, razón de momios, prueba de chi-cuadrado y correlación de Pearson. **Resultados:** Entre las sustancias psicoactivas más consumidas el alcohol mostró destacado (94,0%). Entre los ilícitos, estaba el uso de marihuana (97,6%) e inhalables (97,6%). Con respecto a las motivaciones para el consumo de sustancias psicoactivas, prevalecieron: uso recreativo (57,7%) y relajación (26,6%); en cuanto al contexto, predominó el uso para el descanso (48,8%). En general, los participantes mostraron un riesgo bajo para el consumo de sustancias psicoactivas. **Conclusión:** Las conductas de riesgo identificadas orientan la atención a las demandas de cuidado en salud mental. Por lo tanto, surge la necesidad de fortalecer el círculo de protección de la salud de los trabajadores, centrado en enfrentar esto.
Palabras clave: Médicos; Psicotrópicos; Sustancias de Abuso por Vía Oral; Salud Laboral

RESUMO

Objetivo: analisar o consumo de substâncias psicoativas por médicos de um hospital de alta complexidade do estado do Piauí. **Método:** estudo transversal realizado com 90 profissionais. A coleta dos dados ocorreu entre dezembro de 2018 e julho de 2019, por meio de questionário semiestruturado, composto por variáveis sociodemográficas, ocupacionais e relacionadas à saúde e ao consumo de substâncias psicoativas, além dos instrumentos *Alcohol, Smoking and Substance Involvement Screening Test* e o *Alcohol Use Disorders Identification Test*. Os dados foram analisados por meio de estatística descritiva, *odds ratio*, teste de qui-quadrado e teste de correlação de *Pearson*. **Resultados:** Dentre as substâncias psicoativas mais consumidas, destacou-se o álcool (94%). Dentre as ilícitas, verificou-se o uso de maconha (97,6%) e inalantes (97,6%). Quanto às motivações para o consumo de substâncias psicoativas, o uso recreativo (57,7%) e para relaxamento (26,6%) foram mais prevalentes; em relação ao contexto, predominou o uso para descanso (48,8%). De modo geral, os participantes apresentaram baixo risco para o consumo de substâncias psicoativas. **Conclusão:** O comportamento de risco identificado direciona a atenção para demandas de cuidado em saúde mental. Assim, emerge a necessidade de fortalecer o círculo de proteção em saúde do trabalhador voltado ao enfrentamento da problemática.
Palavras-chave: Médicos; Psicotrópicos; Abuso Oral de Substâncias; Saúde do Trabalhador.

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INTRODUCTION

The problematic use of Psychoactive Substances (PAS) constitutes a worldwide public health problem, whose repercussions are associated with negative impacts in the social, economic, occupational and health spheres, in relation to the context of the user and far beyond his surroundings. According to the 2022 World Drug Report released by the United Nations Office on Drugs and Crime (UNODC), 5.6% of the world's population aged between 15 and 64 years (equivalent to about 284 million people) used drugs in 2020, which represents an increase of 26% compared to 2010. The document brings multifactorial considerations to expressive numbers like these, but it is highlighted that the neglected perception of the real and potential risks of drug use has been associated with higher rates of drug use[1,2].

Despite the deleterious impacts of these substances being more notable among the population with reduced economic resources, the indiscriminate consumption of SPAs has become a reality in different social contexts and age groups. Among the motivational factors for the expansion of this consumption, the occupational environment and its related contexts stand out, in particular, those with stressor characteristics, such as: high activity demands, managerial requirements, long working hours and difficulties in interpersonal relationships, for example[3].

It is noted that work environments can be predictive scenarios for the consumption of psychotropic drugs and for the consequent psycho-emotional imbalances of professionals. The search for quality of life at work is still a challenge for public policies, since it safeguards individual perceptions within collective spaces. Therefore, there is a need to recognize the characteristics of work environments, interprofessional relationships and even the individual demands of each worker that can interfere with the health-disease binomial, such as, for example, risk behaviors for drinking habits, smoking and /or consumption of other substances[4,5].

Specifically, work activities in hospital environments involve potentially stressful situations, contextualized by the dynamics of continuous or urgent demands, haste in solving cases and attending cases, in addition to daily contact with the suffering of patients. With regard to the performance of the medical professional, it may also involve extensive workloads, strenuous experiences that can trigger negative emotions and conflicts with the team, due to the lack of clarity of roles and/or relationships with colleagues[6].

When reacting to these contexts, health workers tend to look for ways to minimize or eliminate stress, and see the use of SPAs as one of the alternatives. In accordance with this circumstance, the cross-sectional study carried out in a large hospital in the capital of the state of Piauí, Brazil, indicated that 84.1% of the 289 health professionals reported the use of alcohol, tobacco, marijuana, inhalants, amphetamines and medications hypnotics, sedatives, antidepressants and/or opiates as a way of relieving everyday

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tensions. It is worth noting that, in the work environment, this consumption contributes to an increased risk of occupational accidents, impaired decision-making, absenteeism and work leave[7,8].

It is important to consider that, although the lack of scientific evidence in relation to the prevention and treatment of the use of psychoactive substances by physicians justifies the scarcity of scientific studies directed to the subject, the understanding of the harmful repercussions, in a multidimensional nature, of the consumption of SPA on health of workers and gaps in the construction of public policies aimed at the problem are consistent motivations for the development of new studies. Therefore, the present study aims to analyze the consumption of psychoactive substances among medical workers in a highly complex hospital in the state of Piauí.

METHODS

This is a study with a quantitative approach, cross-sectional design and analytical evaluation profile, carried out in a High Complexity Hospital, located in a municipality in the Brazilian Northeast. The institution stands out for being a teaching, research and extension hospital, a state reference in highly complex care. It has 349 beds, distributed among its 15 clinics and four Intensive Care Units. It also has outpatient services, clinical hospitalizations, diagnosis and imaging treatment, clinical analysis laboratory and pathological anatomy.

This study is part of a macro research project. The population chosen as a likely participant in the study consisted of 239 physicians, registered in the National Register of Health Establishments (CNES), employees of the aforementioned institution. For the definition of the sample, the calculation for the finite population of Barbetta[9] was used, corresponding to 148 professionals.

Inclusion criteria were defined as: being a medical worker, having an effective contract or length of service for at least one year and a workload of at least 24 hours/week. Those professionals who were on leave from their care position, on leave or on vacation, during the period of data collection were excluded.

During data collection, there was a relative number of losses and refusals, a limitation that influenced the scope of the representative sample. As losses, we considered the instruments incompletely completed by the participants and those professionals who could not be contacted after two consecutive attempts. Regarding refusals, it was characterized by professionals who claimed to have no interest in participating or unavailability of time to contribute to the investigation.

Data collection took place from December 2018 to July 2019, based on the completion of a semi-structured questionnaire consisting of sociodemographic, occupational and health-related variables and SPA consumption, in addition to the Alcohol, Smoking and Substance Involvement Screening Test instruments (ASSIST)[10] and Alcohol Use

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Disorders Identification Test (AUDIT)[11], both validated and widely used in Brazil.

After a general explanation of the objectives and aspects of the study, the professionals signed the Informed Consent Form (TCLE), to confirm their participation in the research. In a reserved place, in the work sector, the participants answered the self-administered questionnaire and returned it to the researcher in charge.

The collected data were tabulated in spreadsheets, in the Microsoft Excel software, submitted to the double typing technique, in order to compare disparities and then exported to the Statistical Package for the Social Sciences (SPSS) program, version 20.0, for the performing descriptive statistical analysis by calculating measures of central tendency and dispersion measures, which resulted in numerical frequency charts and tables.

To verify the association between qualitative variables, the Chi-square test (x^2) was used. The strength of associations between variables was measured using the odds-ratio (OR) and confidence intervals (95% CI). For associations between quantitative variables, Pearson's correlation coefficient was used. All analyzes adopted a significance level of 0.05%.

In accordance with the ethical-legal aspects, the research complies with the ethical principles set forth in Resolution nº 466/2012, of the National Health Council (CNS)(12), and received authorization from the Municipal Health Foundation (FMS) of Teresina, in addition to approval by the Research Ethics Committee (CEP) of Hospital Getúlio Vargas, with opinion nº 3.588.464 and Certificate of Presentation for Ethical Appreciation (CAAE) 79650117.2.3001.5613.

RESULTS

Due to the significant percentage of losses and refusals, the resulting sample consisted of 90 participating physicians. There was a predominance of male professionals (80.0%), aged between 27 and 58 years (mean age group 37.4 years), married (68.9%) and Catholic (91.0 %). There was a predominance (15.5%) of nephrologists among the specialties addressed. Regarding length of service at the institution, 28.4% of participants reported having between 2 and 4 years of service; regarding the multiplicity of employment relationships, 80.0% reported having more than one job.

The main sociodemographic and occupational characteristics of the population are presented in Table 1.

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Table 1 – Characterization of the sociodemographic and occupational profile of medical workers. Teresina, PI, Brazil, 2019.

Variable		N	%	Min.	Max.	M*	DP**
Gender	Female	18	20,0	-	-	-	-
	Male	72	80,0				
Age	-	-	-	27	58	37,4	± 8,8
Marital Status	Married	62	68,9	-	-	-	-
	Single	21	23,4				
	Divorced	04	4,4				
	Stable Union	03	3,3				
Religion	Catholic	82	91,0	-	-	-	-
	Espiritist	02	2,2				
	Christian	02	2,2				
	None	04	4,2				
Time working at the institution	1-2 years	14	15,4	-	-	-	-
	2-4 years	26	28,4				
	4-6 years	13	14,4				
	6-8 years	14	15,5				
	8-10 years	08	8,8				
	10-14 years	08	8,8				
	≥ 15 years	07	7,7				
More than one employment relationship	Yes	70	80,0	-	-	-	-
	No	20	20,0				
Especialty	Nephrology	14	15,5	-	-	-	-
	Cardiology	10	11,1				
	Medical clinic	09	9,9				
	Orthopedics	09	9,9				
	Gynecology	09	9,9				
	Anesthesiology	08	8,8				
	ICU#	06	6,6				
	Angiology	05	5,5				
	Neurology	03	4,4				
	Pneumology	04	4,4				
	Coloproctology	04	4,4				

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Others		05	5,5				
Total	-	90	100,0	-	-	-	-

Caption: *Average; **Standard deviation; # Intensive care unit.
Source: Elaborated by the authors.

As for the reasons for using SPAs, the main motivations and contexts related to this consumption were identified (Table 2), with emphasis on: recreational use (57.7%) and for relaxation (26.6%). Furthermore, rest (48.8%) was prevalent as the situation in which the most consumption occurred.

Table 2 – Identification of motivational factors for the use/abuse of SPAs and consumption context in medical workers. Teresina, PI, Brazil, 2019.

Variables		N*	%
Motivational factors for the use/abuse of SPAs	Recreational use	52	57,7
	Relaxation	24	26,2
	Affective relationships	13	14,4
	Stress	09	10,0
	Insomnia	08	8,8
	Fatigue	08	8,8
	Mental fatigue	07	7,7
	Access facilitated by the	05	5,5
	Profession	05	5,5
	Physical fatigue	04	4,4
	High workload	01	1,1
	Anxiety	01	1,1
	Dissatisfaction with work	01	1,1
	Others		
consumption context	Rest	19	48,8
	Affective social interaction	44	46,4
	Relieve physical symptom	02	21,1
	To sleep	07	8,8
	Increased productivity	01	7,7
	Disinhibition	02	3,3
	Anxiety or fear	08	2,2
	Decrease anxiety	03	2,2
	Mood control	42	1,1

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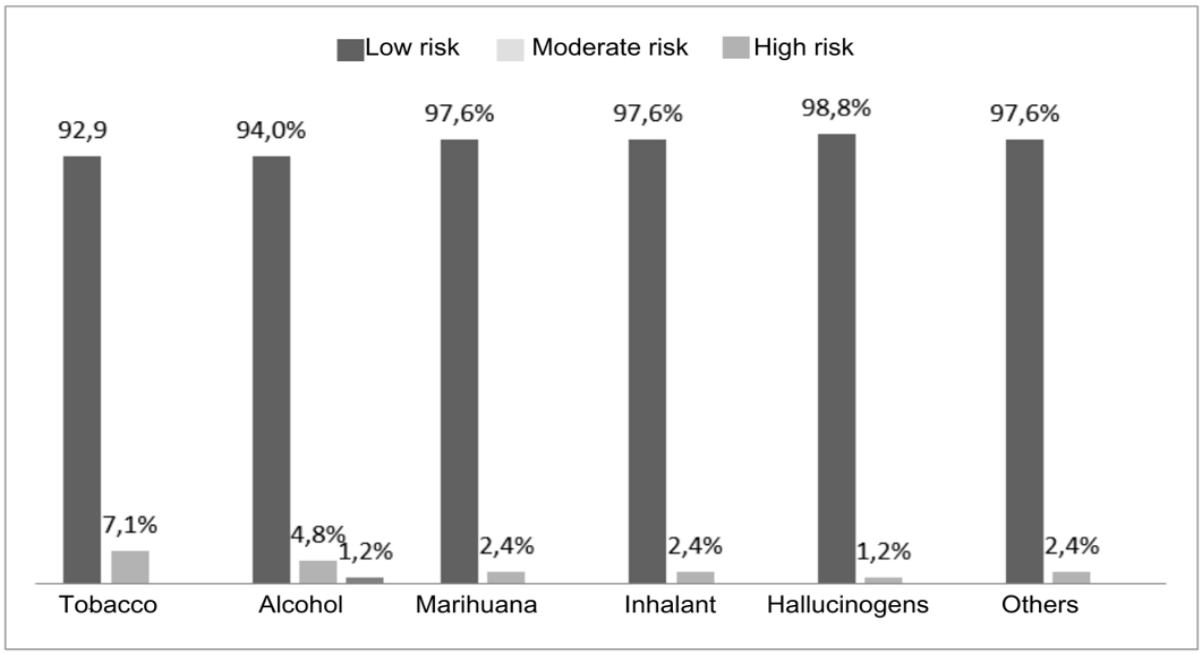
After work	01	1,1

Caption: *N>90, the participant was allowed to mark more than one variable; **Psychoactive Substances.
Source: Elaborated by the authors.

With regard to consumption patterns, in general, participants showed low risk for a significant portion of SPA specimens. The following exceptions stand out: tobacco (7.1%), alcohol (4.8%), marijuana (2.4%) and inhalants (2.4%), which showed levels compatible with moderate risk consumption, as demonstrated in Graph 1.

Graph 1 – Prevalence and risk of consumption of SPAs among medical workers. Teresina, PI, Brazil, 2019.



Source: Elaborated by the authors

DISCUSSION

This study brought the characteristics of medical professionals linked to a clinical and surgical care hospital, mostly men, married and with a mean age of 37.4 years. It should be noted that the investigation of sociodemographic and occupational aspects related to the sample is essential for understanding the population profile and characteristics potentially correlated with the use of PAS, thus contributing to the development of good practices in mental and occupational health.

In general, the sociodemographic and occupational aspects raised by the present study are similar to other investigations[13]. Historically, there is a greater presence of males in the medical profession, however, this

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characteristic has been modified over the years[14].

There was a higher prevalence of alcohol consumption, followed by tobacco. Among illicit substances, marijuana and inhalants had the most representative rates. The study also found a higher consumption of psychoactive substances among young adults, especially alcoholic beverages. In this sense, age seems to be an influencing factor for its use. Alcohol, as it is a licit and socially accepted substance, is disclosed in advertisements that, for the most part, are aimed at the young adult public and favor the social acceptance of its consumption by this public[15].

Religion proved to be a present factor among the participants, most of whom were Catholics. The literature highlights that religious aspects act as protective factors for the use of SPAs. In a way, religiosity helps build the individual's personality, instilling moral values whose purpose is respect and preservation of life. This can be associated with the abandonment of consumption or even its drastic reduction, exposing the subjects to less damage[16,17].

Among the job specifiers of the participants, nephrology was identified as the most prevalent specialty; this is due to the fact that the institution, the study setting, is considered a reference in health for the entire state of Piauí and surrounding areas and has a specialized treatment center for kidney failure, where hemodialysis services, kidney transplants are routinely offered and other nephrological treatments[18].

However, this is not a reality found in the scientific literature in general, which has pointed to anesthesiology as the medical specialty with the highest consumption of psychoactive substances, which is mainly related to the pace of work and easy access to certain drugs[19,20].

Among the investigated workers, the period of 2 to 4 years was the predominant delimitation for the variable on the time of performance in the service. Working time has been a decisive factor for triggering symptoms of stress, occupational illness and consumption of psychotropic drugs. Accordingly, a study carried out with physicians in the United Kingdom identified that physicians with longer experience working in medicine had an increased risk for excessive alcohol consumption profile[13].

The presence of more than one employment relationship also drew attention due to the resulting implications for the physicians' work routine, such as the extenuating weekly workload and potential reduction in quality of life, which is directly related to the illness of the medical worker, stress and Burnout[21].

Conditions like these have been the subject of concern among international organizations, since they are notable generators of stress and psychological distress and, probably, potentiate the use of psychoactive substances, in addition to reducing the practice of physical exercises and the quality of food of health care workers. health, which contributes to a depletion of the general state of health of these professionals[22,23].

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With regard to the motivational factors for the consumption of SPAs, there was emphasis on recreational use and the search for relaxation; regarding the context of main use, there was a predominance of rest. Corroborating the assertion, in a study carried out with 289 health workers from a large hospital in northeastern Brazil, it was identified that the most prevalent motivations for the consumption of these substances were related to recreational use (14.6%), tension relief (12.8%) and anxiety (10.0%), with a predominance of consumption after work (15.4%)[7].

Alcohol consumption is culturally and legally accepted by society, making it the resource most easily used by health professionals. Although the current study has brought discreet indexes regarding the high-risk consumption pattern (1.2%) for alcoholic beverages, these indicators raise the attention regarding the excessive use of the substance in this group.

In addition to the risk of addiction, there are potential health problems resulting from excessive alcohol use. This is what can be evidenced from research carried out with young doctors at the Hospital de Clínicas of the Faculty of Medical Sciences of the National University of Asunción, Paraguay. When analyzing the cardiovascular risk factors in this population, it was determined that drinking behaviors were identified as predominant in this group, as they are present in more than half of the physicians interviewed[24].

In general, the number of participants who showed low risk for the consumption of psychoactive substances listed in the analysis instruments was significant and the majority. However, although in discrete percentages, it is important to mention that the pattern of consumption convergent to moderate risk was present for the substances: tobacco (7.1%), alcohol (4.8%), marijuana (2.4%), hypnotics (2.4%) and hallucinogens (1.2%). In a study with the same analytical approach, it was observed among hospital professionals that there was a greater predominance of medicines for hospital use and for use under medical prescription, being hypnotics/sedatives (12.2%), antidepressants (11.4%) and opiates (7.3%) the most prevalent psychotropic drugs[7].

The prevalence (7.1%) of moderate risk consumption of tobacco derivatives stands out. The “problematic use” of tobacco is similar to that pointed out in research carried out at the national level. However, it is evident that health professionals recognize the relationship between tobacco use and its deleterious effects on health[25,26].

The literature is unanimous when it comes to the impairment in decision-making caused by the use of SPAs, whether acutely or chronically. In the context of medical workers, involvement with these substances can negatively interfere with their work, in addition to triggering difficulties in interpersonal relationships with the team and patients and putting the health of those under their care at risk[13].

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It should be noted that the short- and long-term consequences of psychoactive substance use favor an increase in risky behaviors. The development of mental suffering, such as anxiety and depression, is intrinsic to work, its exhausting and unhealthy conditions, which make workers vulnerable and predispose to the use of SPAs. This association and the resulting decrease in quality of life can lead these professionals to develop suicidal ideations and behaviors. And, given the stigma generated by this situation, the search for help may be delayed[27].

With regard to the number of refusals and sample losses, there was great difficulty for medical professionals to accept contributing to the research. The main justifications were related to the unavailability of time, due to the intense work routines carried out by this group of workers, and the apparent fear of answering questions related to the consumption of SPAs. Such facts are similar to other studies of the same nature, in which there were expressive numbers of refusals and sample losses[7,28,29].

The discriminatory view regarding the consumption/abuse of SPAs is still strongly present in society and when related to the use among health professionals, it has a great impact. This reason justifies that many of these workers demonstrate rejection and do not admit to consuming these substances[7]. However, the research stands out as relevant by presenting to the scientific community important characteristics of the reality of medical professionals, in view of the need to direct care and policies in workers' health for this segment.

Finally, this study presented as limitations the use of the cross-sectional methodology, since this method measures exposure and outcome in a single period of time, which hinders a more precise analysis of the findings evidenced by the research.

CONCLUSION

The findings identified the use of SPAs by medical professionals, highlighting, among licit substances, alcohol and, among illicit ones, marijuana and inhalants. The main factors that motivated the consumption of these substances, reported by the participants, were recreational use and as a form of relaxation.

The risk behavior adopted by doctors directs attention to the demands and needs of mental health care. It is worth considering that these professionals are exposed to contexts of stress and illness due to occupational risk factors present in the environment, as well as exhausting routines, resulting from long working hours and a greater number of employment relationships. Thus, the need emerges to strengthen the workers' health protection circle aimed at facing this problem in order to avoid their physical and mental illness, thus improving their quality of life and not compromising the care provided.

The findings have important impacts for the hospital under study, as well as pointing to the need for discussions directed at other realities in workers' health. Tools such as Permanent

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Education aimed at the health of these and other professionals enable improvements and minimize the impacts related to the use of SPAs. Interventions in the work environment become crucial for preventing illness and promoting health.

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