

FOOD SECURITY, ALCOHOL CONSUMPTION, TOBACCO AND OTHER LIFESTYLES IN WORKERS OF A COMPANY IN CALL CENTER, 2021

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Abstract: Food security exists when the population has physical and economic access to harmless and nutritious foods which must be enough for the satisfaction of needs and preferences in relation to food and thus be able to lead a healthy and active life. In the population especially young and worker with extended schedules of work that risk food security by easily falling into disproportionate alcohol consumption, and tobacco, which threaten the required hours of sleep and derives in a sedentary population with an increased risk of suffering chronic noncommunicable diseases. **Goal:** To relate food security with alcohol, tobacco and other lifestyle factors in the staff of a call center in Costa Rica. **Materials and methods:** The sample is 289 people over 18 who participated voluntarily and anonymously filling a survey through Microsoft 365 forms. The data were collected during the month of October 2021. **Results:** The 51.6% (n = 149) of the working population does not perform physical activity, the most representative food insecurity being. With respect to tobacco, 85.8% (n = 248) do not smoke and of those who smoke 10.7% (n = 31) are also in severe food insecurity. 58.1% (n = 168) consume alcohol, 38.1% (n = 110) consumes it 1 to 2 times per month and 20.1% (n = 58) consume it weekly. It also presents a relationship between food insecurity and the little realization of physical activity, tobacco and alcohol consumption, which statistically corresponds to a significant result, however, a weak effect is mentioned according to Cramer's V value Conclusion: there is a relationship between insecurity Food and the low performance of physical activity, tobacco and alcohol consumption, which is statistically significant, being the most severe degree of food insecurity present or related in unhealthy lifestyles.

Keywords: Public health, alcoholic beverages, smoking, sedentary lifestyle.

INTRODUCTION

Food security is conceptualized as a situation where at all times, the population maintains physical and economic access to harmless, nutritious foods and in sufficient quantities, which allow the population to satisfy food needs and lead a healthy and active life. On the other hand, food insecurity is considered a scenario in which there is uncertain or zero access to nutritious, adequate and socially acceptable foods ¹.

About 12% of the world's population was affected by severe food insecurity in 2020, which is equivalent to 928 million people, that is, 148 million more than in 2019. It is indicated that this population presents malnutrition problems, mainly because They cannot pay healthy diets, which is also related to the appearance of chronic noncommensurable diseases ².

Among the problems that may be related to food insecurity and therefore with public health, are those concerning the consumption of psychoactive substances, in addition to tobacco and alcohol. Being the youngest population that presents the greatest proportion in their intake and use. According to the data of the Institute on Alcoholism and Pharmacodependence (IAFA)³ In relation to the prevalence of active consumption of alcoholic beverages according to sex and age, the age group with the highest consumption corresponds to the 20 to 29 years, where 46.9% of men consume alcohol regularly, while of women only 25.5%. Secondly, there is the group of 30 to 39 years where 41.6% of men and 24.0% of women indicate regular alcohol consumption.

As for tobacco consumption, the global prevalence of smokers has decreased markedly. There are currently 1,100 million adult smokers in the world and less than 367 million smokeless tobacco consumers ⁴. In the region of the Americas there are 132 million

smokers. Tobacco causes death to more than 7 million people every year, being more than 6 million, consumers of the product and around 890,000 people, are non -smokers, exposed to the smoke of the alien tobacco.

Regarding physical inactivity, it is mentioned that the worsening of eating habits, labor technology, and new leisure models collaborate so that the population has sedentary behaviors and that they are therefore harmful to health ⁵. Physical inactivity or lack of exercise is one of the greatest risk factors in the development of cardiovascular disease, even a direct relationship between the sedentary lifestyle and cardiovascular mortality is observed. A sedentary person has more risk of suffering atherosclerosis, hypertension and respiratory diseases, among others.⁶

Therefore, this research seeks to relate the factors exposed to the risk presented by the collaborators of a Call Center company regarding their food security; The above based on the vulnerability in which they are at work schedules, free days, physiological, social, psychological and other factors associated with their lifestyle.

MATERIALS AND METHODS

The investigation is descriptive quantitative type. Study participants correspond to a total of 289 collaborators of a company in Call Center, of both sexes, all over 18 years of age with different work roles within the company, both from management work to operational and miscellaneous and cleanliness.

For the investigation, a joint elaboration instrument, a questionnaire type built in Microsoft Office 365 Forms, which was distributed through WhatsApp messaging and by email in order to collect in the most efficient way the necessary information related to The variables of the study.

For this, a dependent variable is used, the

food security measured with the ELCSA scale designed and evaluated by FAO with the Rasch model for Latin America and the Caribbean.

As independent variables, work is worked: the practice of physical activity, alcohol and tobacco consumption or other similar substances.

It is used as cutting and classification points of food security, those recommended by FAO for homes composed of adults.

Affirmative response numbers	Classification
0	Security ^(a)
1 to 3	Light insecurity
4 to 6	Moderate insecurity
7 to 8	Severe insecurity

Table N°1. Cutting points for the classification of food security

Source: FAO – ELCSA,2012.

^(a) Note: According to the criteria for inclusion and exclusion of this research, people in food security are not subject to research.

The relationship of the main variables with food security or insecurity is analyzed by the Chi Cuadrado test, with $\alpha = 0.05$, where;

Hypothesis:

H0 The variables x, and are independent

H1 the variables x, and are dependent

The variable and in all cases is food security or insecurity

Variable X is replaced by the following: physical activity practice, tobacco consumption and alcohol consumption

Index value Cramer V	Criterion
0 to 0.10	There is not any effect
0.11 to 0.30	Small effect
0.31 to 0.50	Moderate effect
0.51 to 1.00	Large effect

Table N°2 Criteria for the analysis of the V value of Cramer

Source: Facultad de Estadística de la Universidad Santo Tomás Colombia cited by Betancourt V.

Andrea & Caviedes N. Ivonne 2018

RESULTS

Next, the results of the study are presented, starting with the sociodemographic results.

The filling of the survey was voluntary among the Call Center officials in its different venues, the participation of 291 people was obtained, two of these are in a state of food security; Applying the inclusion and exclusion criteria work with the remaining 289 that present some degree of food insecurity.

The table shows that of the population that participates in the study, the majority belonged to the female sex corresponding to 179 workers (62%), and being the highest ranges for the three types of food insecurity comparing it with the male sex. In addition, the highest range was in severe food insecurity for both sexes while the female sex in a higher position (N: 103).

With respect to age, the most affected rank according to the degree of food insecurity was between 18 and 27 years in all grades. Where severe food insecurity obtained as many workers that corresponds to 40% of the total population.

In relation to the practice of physical activity, it represents one of the greatest challenges with this population, only 1.7 % of the population performs physical activity every day, while those who do not perform or perform less than three times a week, represent the 77.8% of the population. On the other hand, we can see that the level of food insecurity with the highest percentage is that of severe insecurity with 54.7% of the collaborators.

In addition, within life styles it can be identified with respect to the smoking that 85.8% do not smoke, 10.7% of employees indicate smoking tobacco. The highest percentage of these are in moderate and severe food insecurity (3.8% and 5.2% respectively). Only 3.1% of the population indicated smoking other substances.

And to alcohol consumption reflected in the same table, it is observed that 41.9% of the population does not consume alcohol. Among those who, if they refer to it, stand out 38.1% that are those who consume 1 to 2 times per month representing a very sporadic consumption. On the other hand, only 20.1% consume it weekly. There was no difference between food insecurity levels and alcohol consumption.

Table 4 shows a relationship between exercise practice variables, tobacco and alcohol consumption and food insecurity levels resulting in a small effect that statistically corresponds where the fields are weakly associated

DISCUSSION OF RESULTS

According to the results, it is observed that the female sex was in greater proportion in the study. There are many possible reasons for these results, one may be that in today's world women are involved in the search for work sources, knowing that it is a genre that has great participation in the nutritional needs of their homes, performing an important Paper to ensure the food security of your family, taking care that part of your income is spent on food. 7. Another of the possible causes is related to the existence of a massive incorporation of women into the labor market where one of the sectors that most occurs the phenomenon of feminization is in the so-called call centers, mentioning that this genre has certain skills that are considered as an inseparable part in this type of work due to their empathy, their communication and sometimes the calm and mission they have when managing the work imposed in this type of organizations.⁸

On the other hand, the population under study according to age were young adults among the ages between 20 and 30 years. Data that agree with the study conducted by López, who found that the most frequent age

Variable	Food insecurity			
	Light	Moderate	Severe	Total
Gender				
Female	16	60	103	179
Male	12	43	55	110
Total	28	103	158	289
Age				
18 to 27 years	14	57	115	186
28 to 37 years	12	31	33	76
38 to 47 years	0	9	8	17
More than 47 years	2	6	2	10
Total	28	103	158	289
Physical activity frequency				
The person does not perform physical activity	14	47	88	149
Less than 3 days a week	8	27	41	76
3 to 6 days a week	6	26	27	59
Every day of the week	0	3	2	5
Total	28	103	158	289
Tobacco consumption and other substances				
The person does not smokes	23	86	140	248
The person smokes tobacco	5	11	15	31
The person smokes substances other than tobacco	0	6	3	9
Total	28	103	158	289
Alcohol consumption				
The person does not consume alcohol	14	38	69	121
3 to 5 times week	2	2	2	6
1 time per week	5	22	25	52
1 or 2 times a month	7	41	62	110
Total	28	103	158	289

Table N°3 Distribution of Call Center workers according to sociodemographic characteristics and lifestyles due to the degree of food insecurity. Costa Rica 2021 (n = 289)

Source: Own elaboration, 2021

Associated variable	Chi Square of Test	Value P according to chi square test	Decision	Cramer V	Decision
Exercise practice	4.80	0.569	H0 is rejected	0.13	Small effect
Tobacco consumption	5.78	0.448	H0 is rejected	0.14	Small effect
Alcohol consumption	7.60	0.268	H0 is rejected	0.16	Small effect

Table N°4 Relationship of the level of food insecurity and study variables (n=289)

Source: Own elaboration, 2020. NOTE: CRITICAL SQUARE CHI = 9.48772

of respondents was 20-30 years in 63 %. It must be noted that the Call Center industry in general, has as its target population, young between 20 and 30 years, bilingual or multilingual preferably.⁹

With respect to physical exercise, it can be determined, that as the practice of physical activity decreases, the degree of food insecurity increases. It is also striking that those collaborators who do not perform physical activity are those who present the highest results in each of the levels of food insecurity, and that as the frequency of physical activity increases, the number of people decreases for each of the levels of food insecurity.

In sedentary lifestyle was significantly higher among those who presented severe food insecurity. It is observed that 51.6% of the population does not perform physical activity.⁸ It is clear that physical inactivity, overweight and obesity are already recognized as risk factors for chronic noncommunicable diseases and that 9% of premature deaths are related to physical inactivity¹⁰.

Work roles in a call center or other companies can influence the appearance of sedentary lifestyle and bad eating habits, as they tend to increase disorders in food times, due to the limited amount of time available for the feeding. In addition to these factors and under the effects of Pandemia by COVID-19, it can be understood that the teleworking modality has increased, reducing transfers to work centers and generating an effect on the physical movement of people, which, which It can increase sedentary lifestyle in workers.¹¹

According to the analysis of the California survey of health interviews - 2011-2012¹², based on a sample of young adults from 18 to 30 years which were considered a socio-economically disadvantaged group given their conditions of study and poverty, in this study there are high rates of cigarette consumption. The prevalence of cigarette consumption

was significantly higher in young adults who notified having had food insecurity (26.9%) than among those who notified to have food security (16.4%). In this study, food insecurity was very associated with the consumption of daily cigarettes, but not the non-daily consumption.

Thus, this study concludes that those who had food insecurity could be considered as a high-risk group in relation to cigarette consumption.

Another aspect that highlights table number 7 is that within the population that consumes alcohol regularly there was no difference between food insecurity levels.

It is known that the harmful use of alcohol is considered a causative factor of around 200 diseases on average; Among them overweight and obesity, these being considered as the epidemic of the 21st century¹³.

Given this situation, the importance of educating and sensitizing the population about moderate alcohol consumption, avoiding their abuse to achieve a healthy lifestyle. Its increase is a public health problem, which includes and compromises all sectors of society, where it is necessary to raise public awareness of the harmful effect of an irresponsible consumption of alcoholic beverages¹⁴.

CONCLUSIONS

The most representative age for both the population under study and the degree of food security was 18 to 27 years. With respect to sex was the female in greater proportion as well as the most severe degree of food insecurity

There is an effect regarding physical activity, and tobacco and alcohol consumption, and its relationship to the degree of food insecurity being the most severe degree present or related to unhealthy lifestyles.

According to physical activity, it is concluded that the population that performs

at a frequency less than the week has more severe risk of food insecurity, as are those who are sedentary.

Although the vast majority of the population does not consume tobacco or other substances, who if they consumed it were at moderate and severe risk of food insecurity.

Likewise, alcohol, although those who did not consume were at the severe risk of food insecurity, also those who took both one or two times a week and monthly were within the moderate and severe risk groups.

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