

CAFFEINE CONSUMPTION AND SLEEP

QUALITY IN ADULTS

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INTRODUCTION

Caffeine is a psychostimulant substance that causes several physiological effects and there is a discussion on the relationship between its ingested amount and health (Wierzejska, 2012). Although sleep quality can be influenced by several factors, caffeine consumption is one of the main ones (Clark & Landolt, 2017; O'Callaghan, Muurlink & Reid, 2018).

AIMS



To characterize caffeine consumption in adults and verify the relation between sleep quality and caffeine consumption.

METHODOLOGY

An observational, cross-sectional, quantitative and analytical study was developed, based on a non-probabilistic sample of 220 adults. The evaluation of caffeine consumption was carried out through questions referring to caffeinated beverages and the daily amount of consumed caffeine per individual was calculated. Pittsburgh Sleep Quality Index (PSQI) (Del Rio João et al., 2017) was used to collect information about sleep quality.

RESULTS

Table 1. Characterization of the sample's caffeine consumption

Caffeine Consumption	Mean	Standard Deviation	Minimum	Maximum
Amount of caffeine consumed (mg/d)	124,16	± 98,918	3,94	413,53

The sample showed an average caffeine consumption of 124,16 ± 98,918 mg.

Table 2. Correlation between caffeine consumption and age

Caffeine Consumption	Age	
	Rho	p-value ^a
Amount of caffeine consumed (mg/d)	0,221	0,001*

(*) Statistically significant correlations at the 5% significance level
(^a) Spearman's rank correlation coefficient

Statistically significant correlations were found between caffeine consumption and age, showing that there is a higher caffeine consumption as age increases.

Figure 1. Characterization of the sample's sleep quality

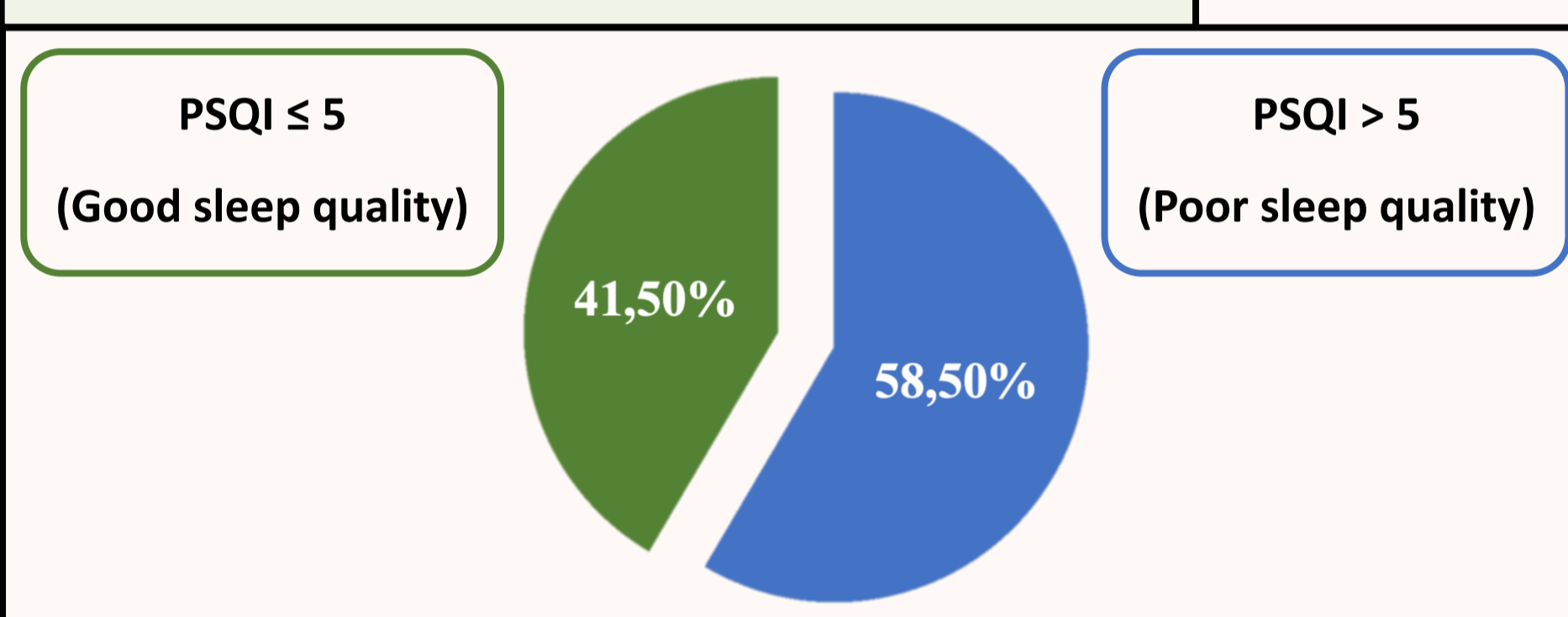


Table 3. Correlation between caffeine consumption and sleep quality

Global PSQI score and its components	Caffeine Consumption	
	Rho	p-value ^a
1. Subjective sleep quality	-0,118	0,082
2. Sleep latency	0,014	0,840
3. Sleep duration	-0,227	0,001*
4. Sleep efficiency	-0,030	0,665
5. Sleep disturbance	0,105	0,122
6. Use of sleep medication	0,069	0,315
7. Daytime dysfunction	-0,252	0,151
Global PSQI score	0,139	0,042*

(*) Statistically significant correlations at the 5% significance level
(^a) Spearman's rank correlation coefficient

Increases in caffeine consumption led to shorter duration and poorer quality of sleep.

CONCLUSION

Considering the results obtained, it is fundamental to increase the population's literacy about caffeine consumption and, at the same time, about the importance of a good sleep quality in order to improve individual's health.

REFERENCES

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