



Caffeine Consumption among Medical Interns and Association with GPA in Makkah Region

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ABSTRACT

The Vagarious amount of caffeine may become harmful in frequent use, it increased among medical interns in Makkah region. The caffeine becomes a daily routine for medical interns without attention for their side harmful effect. The purpose of our study was to evaluate the educational level of awareness of the harmful effect of caffeine consumption. This was a cross-sectional study from August to October 2016. A total number 437 of participants with GPA groups, Group I (GPA 1.5-2), Group II (GPA 2.1- 3) and Group III (GPA 3.1- 3.5). The higher percentages were the group II and female consumed caffeine frequently more than male.

Keywords: Intern; Medical; Caffeine; Coffee

INTRODUCTION

Caffeine consumption is considerably increasing among medical intern, although caffeine had been considered to be extremely harmful infrequent uses. People who consumed a vagarious amount of caffeine they tend to have tremor, irritability and sleep disorder.^[1]

The most updated high scale published epidemiological data on caffeine consumption in The United States (US) was collected for 10 years, the result showed that 87% of total study population in the US regularly consume caffeine in high amount and they found a correlation between their age and consumption amount reach to 193 mg in age 35 to 64 years.^[2]

In Addition, another survey on the potential intake of caffeine were conducted in Brazil, the average and daily intake of caffeine was ranged from 2.7 to 1.8 mg/Kg. in other hand previous studies showed that caffeine hasside effects and may reach intoxication level; studies show that almost every organ system is affected when caffeine is taken in large quantity.^[3]

Energy drinks are available at market in Makkah hospital campus without regulation and proper education for its side effect for general and medical staff.⁴ Therefore, there is a great concern about energy drink consumption, especially among young age group.

Moreover, In Saudi Arabia there are no previous studies exploring this uprising this fusion in general population and more especially among medical interns.^[5]

The aim of this study was to estimate the prevalence of caffeine consumption among medical interns and correlate these finding with the reasons behind these phenomena.

MATERIALS AND METHODS

In this study, 437 medical interns participated in this cross-sectional survey in Makkah region from different hospitals in Makkah region includes Makkah, Jeddah and Taif Cities, from August to October 2016. We distributed the questionnaire electronically as a Google form through social media website groups which cover a huge number of medical intern.

The data was entered into SPSS software (Version 16). The Chi-square test was used to assess the association between variables and value of $P < 0.05$ was taken as statistically.

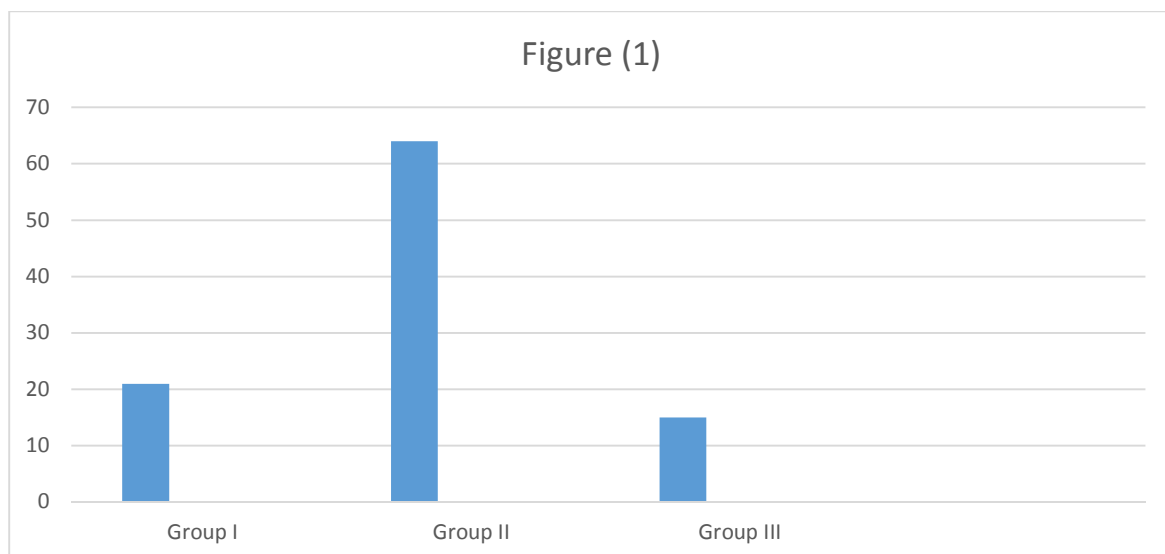
Permission from the ethics committee at Umm AlQura University was granted prior to initiation of the study.

Regarding of GPA and their caffeine consumption, we categorized the participants into three groups: Group I (GPA 1.5-2), Group II (GPA 2.1- 3) and Group III (GPA 3.1- 3.5). Group I present 18.4% (n=70) and 57.1% among group II (n=217) and 24.4% among group III (n=93).

RESULTS

Among 437 medical intern participants (180 males, 257 Females) total GPA ranged from 1.5 to 3.5 out of 4. The total percentage of caffeine consumers were 86.9% (n=380) of all participants. Regarding of the gender the higher proportion of female medical interns consumed caffeine drinks when compared to female.

The results showed the percentage of caffeine were close to each group with higher percentage with group II by 62 %figure (1).



DISCUSSION

In this study we found that majority of participants were familiar with different types of caffeine consumptions, our finding agrees with general reports in different countries.^{[6],[7]}

Based on high response rate from each group, it can be stated that the result obtained in this investigations are representative of the target population.

The results indicated that group II was 64% of the total participants, and we observed that the average group interns were the highest group percentage.

According to the gender, the female consumes the caffeine more frequently than male, they reasons behind that apparently with our questionnaire. The reasons were to feel more alert and more social prestige.

In addition, we observed the medical interns consume more caffeine due to their lifestyle, In middle eastern region especially in Saudi Arabia, Arabic cafe considered as a traditional drinks in our country.

In general, there are a several limitations in this study, low sample size that may introduced nonresponsive bias. And this study may offer important exploratory findings for medical interns in Saudi Arabia. Future studies could be attempt a different study design to gain more insight into factors contributing to caffeine drink consumptions.

CONCLUSION

The prevalence of caffeine consumption among medical interns in Makkah region consider high, the traditional lifestyle (Arabic Café) may effect in overall results. Female consumptions of caffeine more frequently than male due to social prestige. In general all participants consumed more caffeine during preparation exam periods and in on-call times. We recommend creation of continued public health education about their benefits and side effect. Further investigation and study could be conducted to assess the educational level of awareness about their side effect.

Conflict of interest:

The Authors have no funding or social of interest to disclose.

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