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“Fueling the Future: Exploring Caffeine Consumption in Health Professional Students”

Introduction: Caffeine is a highly popular stimulant, frequently introduced in new products that are marketed to young adult consumers. Studies indicate that at lower doses, caffeine enhances wakefulness and attention, while higher doses may lead to more negative effects such as insomnia, anxiety, and heart palpitations. In health professional students, higher caffeine intake has been linked to poorer sleep quality, increased stress, and anxiety. However, the use of caffeine across health professional students in the United States has not been thoroughly explored. This study aims to examine the pattern of caffeine consumption and its associations with demographics and caffeine-related side effects in health professional students at LSU Health Sciences Center-New Orleans.

Methods: A survey was conducted across health professional programs at LSU Health Sciences Center-NO to gather information on students' caffeine consumption and the presence of caffeine-related side effects. Responses were collected anonymously via the RedCap system and analyzed using Excel and SAS. Participants were categorized into two groups based on their reported range of weekly caffeine use: low consumers (1 or fewer products per day, including non-consumers) and high consumers (2 or more products per day). Chi square was used to determine statistical significance between groups.

Results: A total of 128 responses were analyzed, with 31 participants in the low-consumption group and 63 in the high-consumption group. Overall, 92.5% of respondents reported caffeine use during the past month, with regular coffee being the most frequently consumed (72.9%), followed by espresso (62.7%), tea (45.1%), and energy drinks (45.1%). Over half of caffeine consumers (52.1%) reported consuming 3 or more different types of caffeinated products weekly. There was no significant difference in the distribution of participants into low and high consumption groups across programs or academic years. Overall, caffeine use was slightly higher among females (94.4%) compared to males (88.6%). Furthermore, females accounted for 73.0% of the high caffeine consumption group, but only 54.8% of the low caffeine consumption group, although this relationship was not statistically significant. In comparing adverse effects between the groups, 77.05% of high caffeine consumers reported experiencing insomnia at least occasionally, compared to 54.84% of low caffeine consumers ($p < 0.03$). However, no significant difference was found in sleep duration. There was also no significant difference in hours studied per week between high and low consumers. Assessment of food preferences is currently underway.

Conclusion: The study demonstrates that caffeine consumption is prevalent among health professional students at LSU Health Sciences Center-NO, with a majority of students using multiple types of caffeinated products for stimulation. However, their caffeine use does not appear to be driven by studying, suggesting the need for further studies to explore reasons for consumption. Assessment of food preferences is currently underway and may also be associated with amount of caffeine use.