

Introduction & Goals

This dashboard works with a fictitious dataset from Kaggle (<https://www.kaggle.com/datasets/hanaksoy/health-and-sleep-statistics>) and focus on sleep health and lifestyle related factors, such as:

- Sleep Quality: which ranges from 4-9, with 9 being the highest quality.
- Daily Routine: including bedtime, wake-up time, dietary habits.
- Physical Activity Level: from low to high, daily calories burned, daily steps taken.
- Health Indicators: presence of sleep disorders and medication usage

The goal of this analysis is to identify which lifestyle factors are most associated with good sleep quality and to uncover insights that could help improve it.

Findings

A key finding from the analysis is that inactive men in their 40s are more likely to experience poor sleep quality. Men with low sleep quality often rely on medication, have unhealthy dietary habits, go to bed later, and exhibit a higher prevalence of sleep disorders.

The dashboard clearly demonstrates that physical activity plays a crucial role in achieving good sleep quality. Individuals who engage in regular exercise report significantly better sleep, while those who remain inactive struggle with poorer sleep patterns. Notably, 95% of individuals in this dataset reporting sleep disorders are men. These men also display concerning health patterns, such as late bedtimes and poor dietary choices, which seem to significantly impact their sleep quality.

In contrast, women in this dataset show better overall health indicators, including fewer sleep disorders and lower reliance on medication. They tend to report higher sleep quality, particularly when they maintain a healthy routine and stay active.

Actionable Insights

Based on these findings, companies could explore several strategies:

- Health Programs: Target inactive men in their 40s with health programs that combine physical activities, personalized dietary plans, and medical checkups to address sleep disorders and medication use.
- Targeted Marketing: Brands offering sleep aids, from apps to pharmaceuticals, could benefit from focusing marketing on this demographic through social media or other channels.

Limitations

While this dataset was relatively clean and manageable, I would prefer to work with a larger, real-world dataset that covers a wider age range. Although I made minimal changes, creating a new table to calculate each person's sleep duration, there was no need for extensive data cleaning or modeling.

In future projects, I aim to tackle more complex datasets that require thorough data cleaning and modeling. This experience will allow me to practice these crucial data analysis steps and enhance my skills.

Feedback and Insights

What do you think of the dashboard? Were the visualizations easy to understand? Since I didn't create many custom measures, did you experience any slowdowns while interacting with it?

I'm still working on balancing learning new tools with meeting deadlines, but I'm excited to start working on another project like this! If you have any feedback, tips, or just want to chat about data, feel free to reach out in the comments or message me directly.