



Baseline Measures of Lifestyle Medicine in Patients Enrolled in the UCLA Lifestyle Medicine Clinic



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Background

- Lifestyle Medicine is the evidence-based practice of helping individuals and families adopt and sustain behaviors that improve their health and quality of life.
- Key areas of lifestyle medicine include diet, physical activity, sleep, stress, substance use and social connectedness.
- In our study, we examine the baseline health of the patients enrolled in the UCLA Lifestyle Medicine Clinic, including their health-related behaviors in the six key areas of Lifestyle Medicine
- Our study enabled us to better understand the challenges faced by our patients as well as highlight future areas of intervention to improve their health and well-being.

Methods

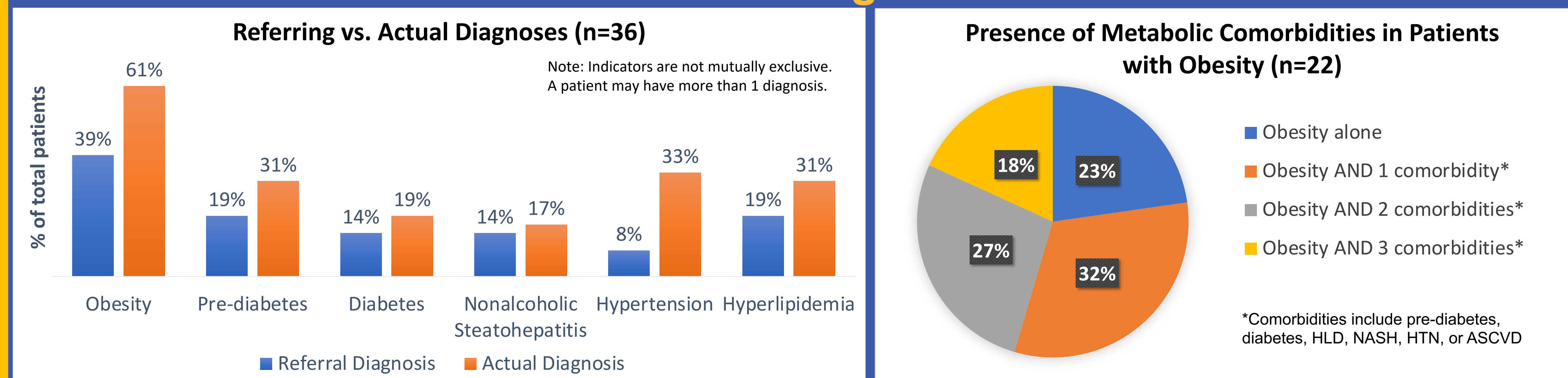
- IRB approval was obtained (IRB # 21-000168)
- Pre-existing EHR data were abstracted and analyzed for 36 patients enrolled in the UCLA Lifestyle Medicine Clinic (10/2019 - Present)
- Data gathered included demographic data, body mass index, hemoglobin A1c levels, cholesterol levels, liver function panel, comorbid diagnoses and medications as well as process measures such as dietary intake, amount of physical activity, sleep and stress levels, and social connectedness
- Data were collected and managed using REDCap, a secure HIPAA-compliant web-based software
- Data were subsequently exported to Microsoft Excel for data analysis and visualization

Results

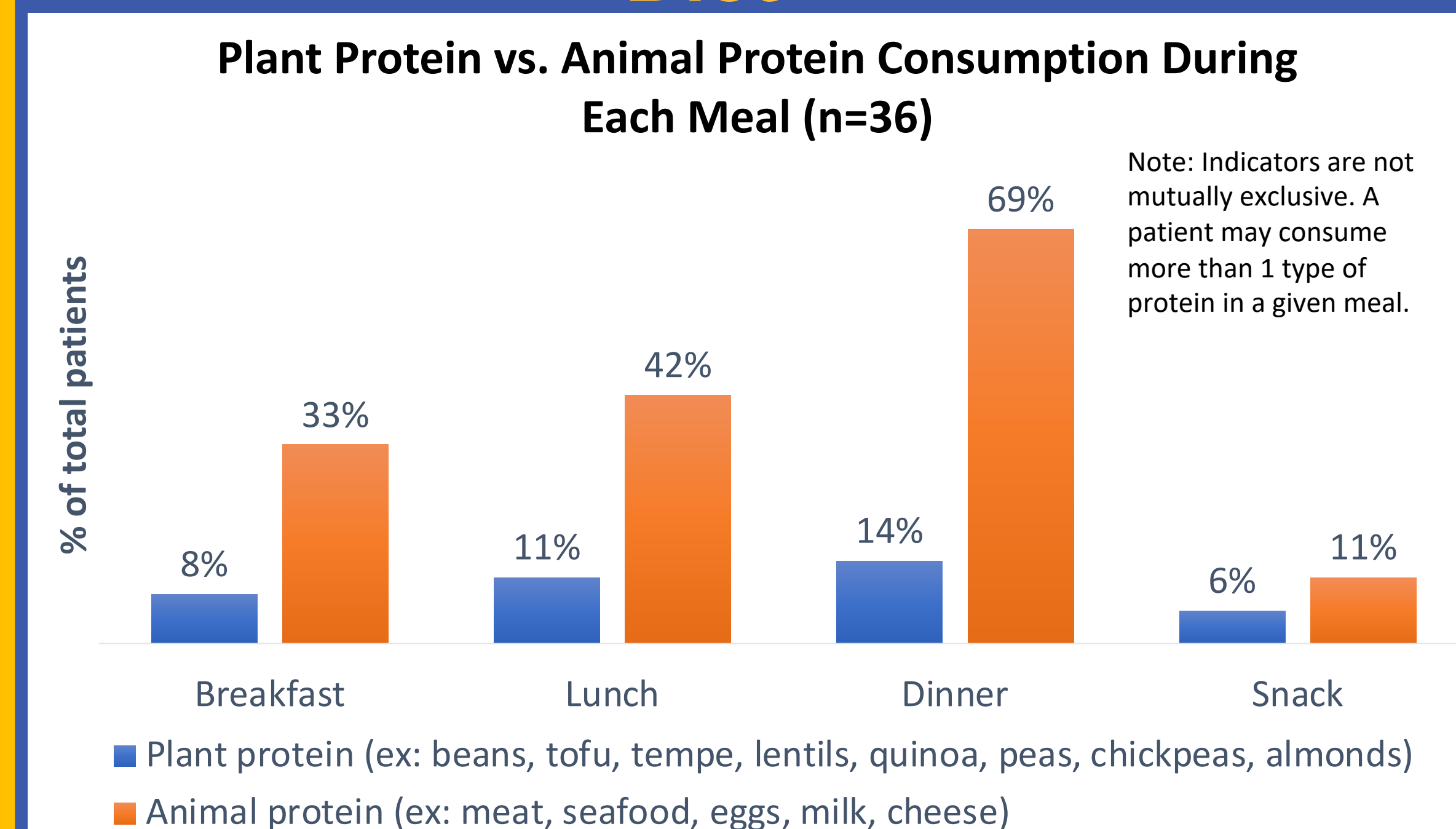
- Demographics (n=36):
 - Age: 8 y/o to 78 y/o (Mean 41.7, SD 20.2)
 - Legal sex: Male (50%) and Female (50%)
 - Race: White or Caucasian (66.7%), Asian (16.7%), Black (2.8%), Other Race (5.6%), Declined to specify (2.8%), Unknown (5.6%)
 - Employment status: Employed (44.4%), Unemployed (27.8%), Student (5.6%), Retired (5.6%), Unknown (16.7%)
- BMI Distribution (n=36): Healthy weight (8%), Overweight (11%), Class 1 Obesity (28%), Class 2 Obesity (8%), Class 3 Obesity (6%), Unknown (39%)
- Blood Pressure Distribution (n=36): Normal BP (19%), Elevated BP (19%), Stage 1 HTN (6%), Stage 2 HTN (14%), Unknown (42%)
- A1c Distribution of patients with pre-diabetes and diabetes (n=18): 5.7 to 6.4 (67%), 6.5 to 8 (22%), 9 to 10 (6%), >10 (6%)

Results (continued)

Medical Diagnoses



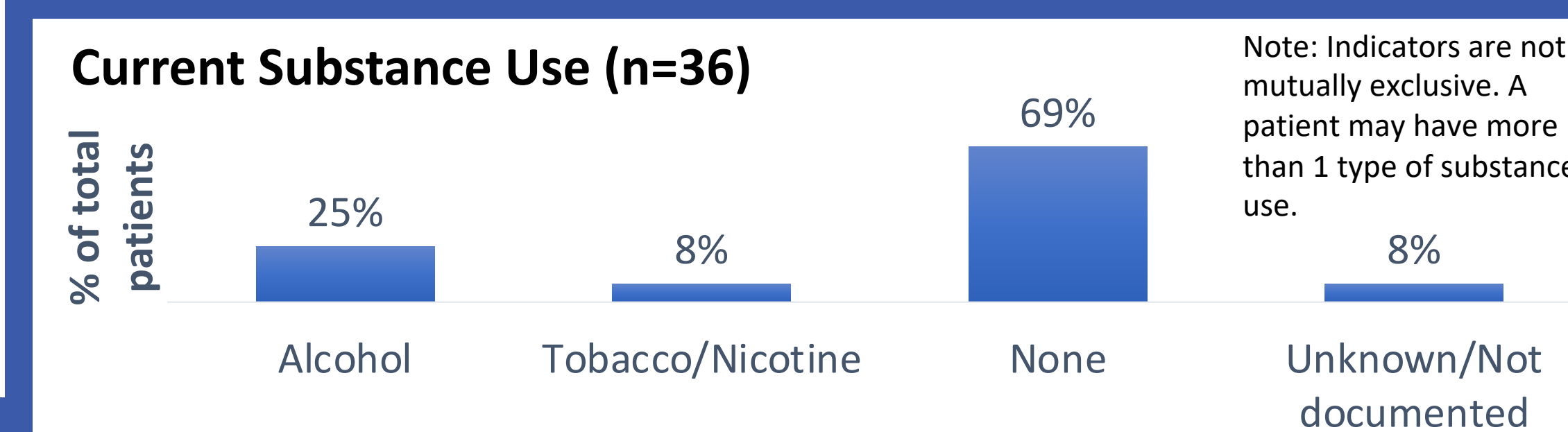
Diet



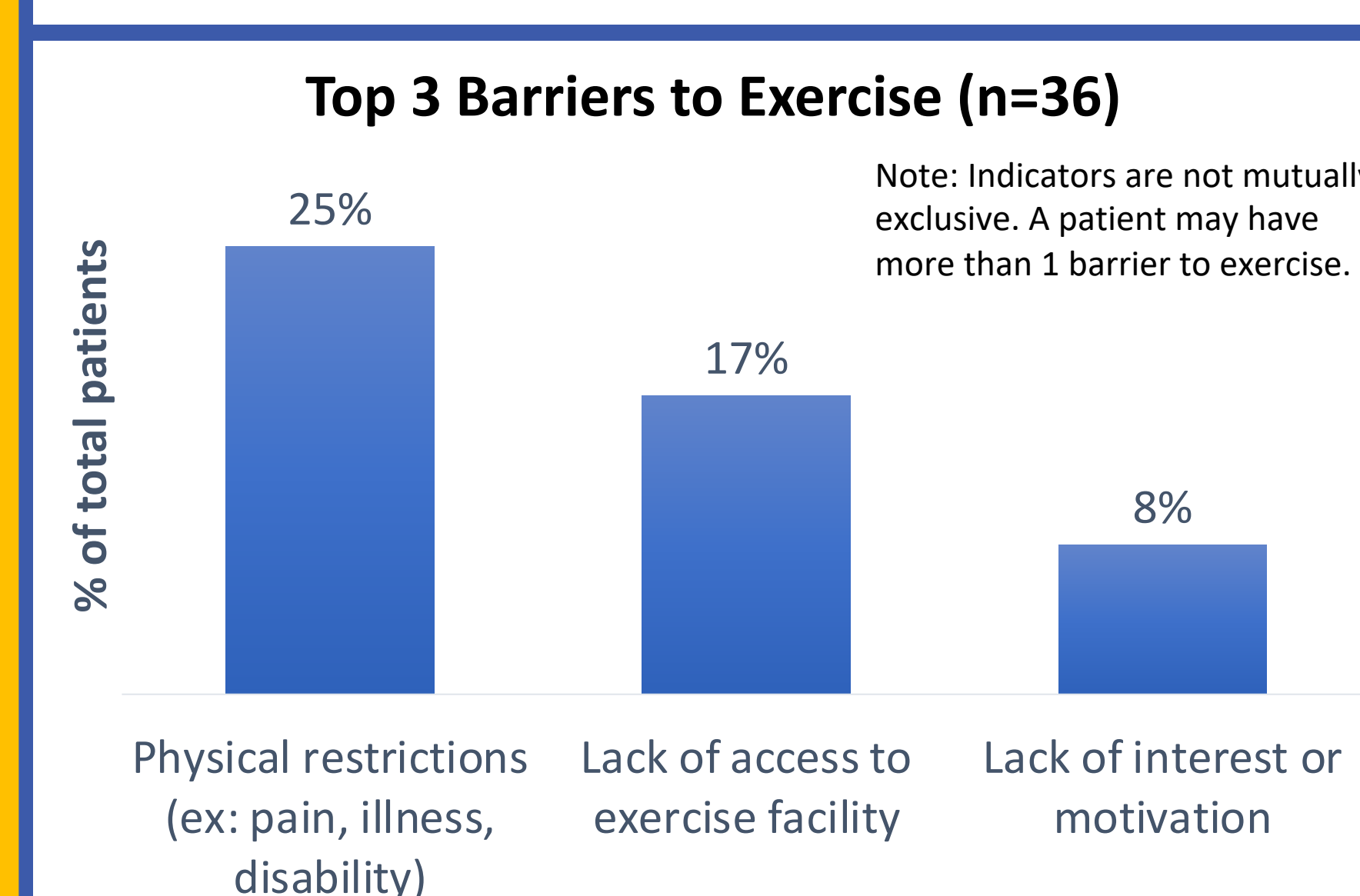
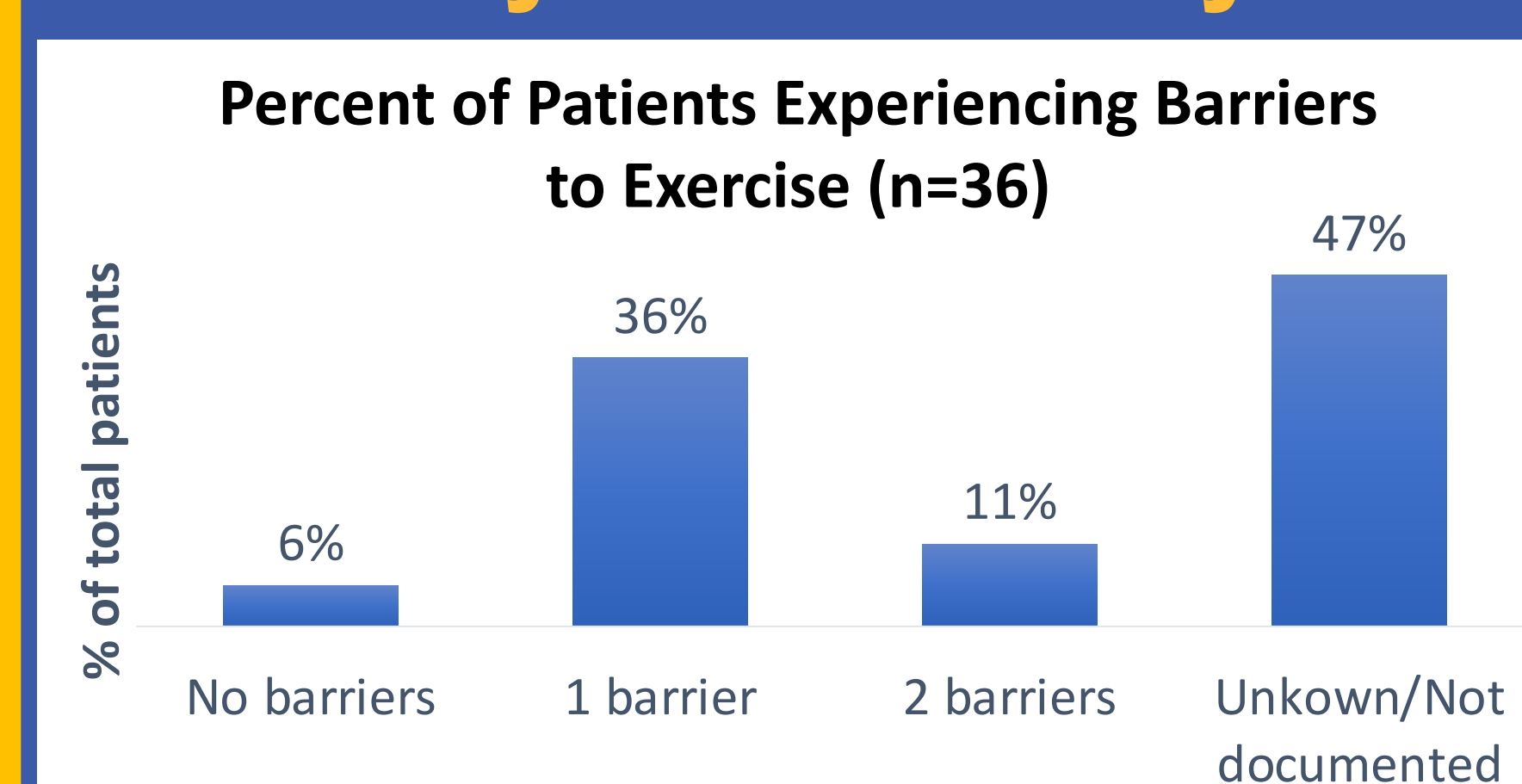
Sleep



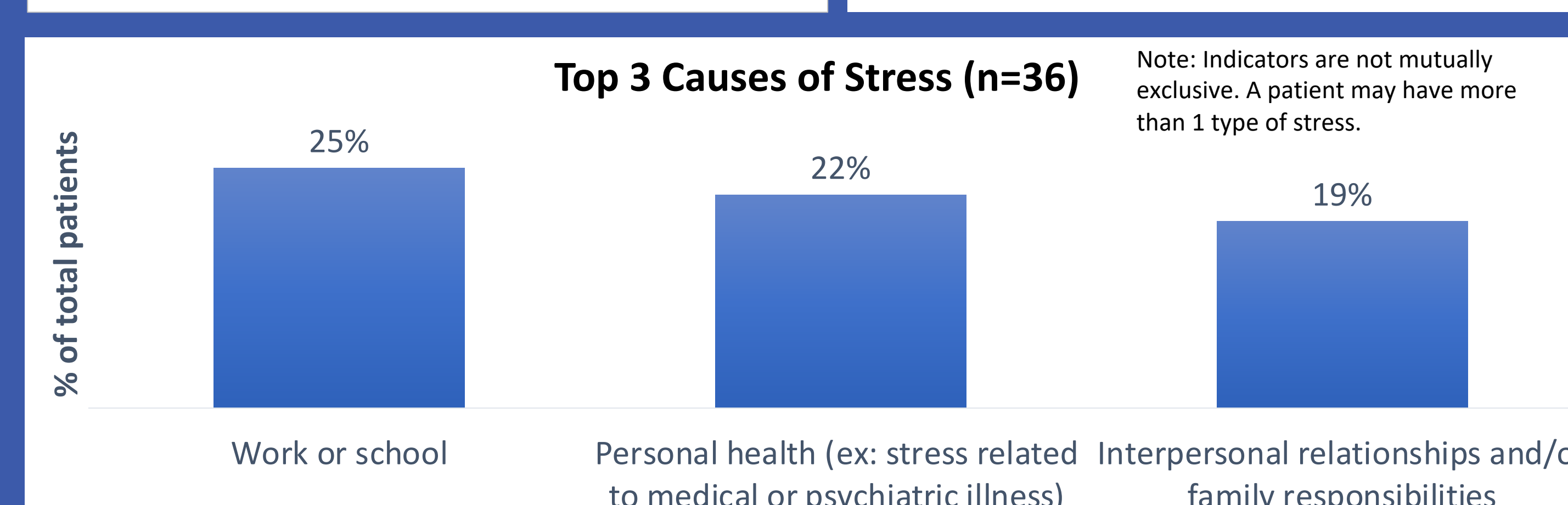
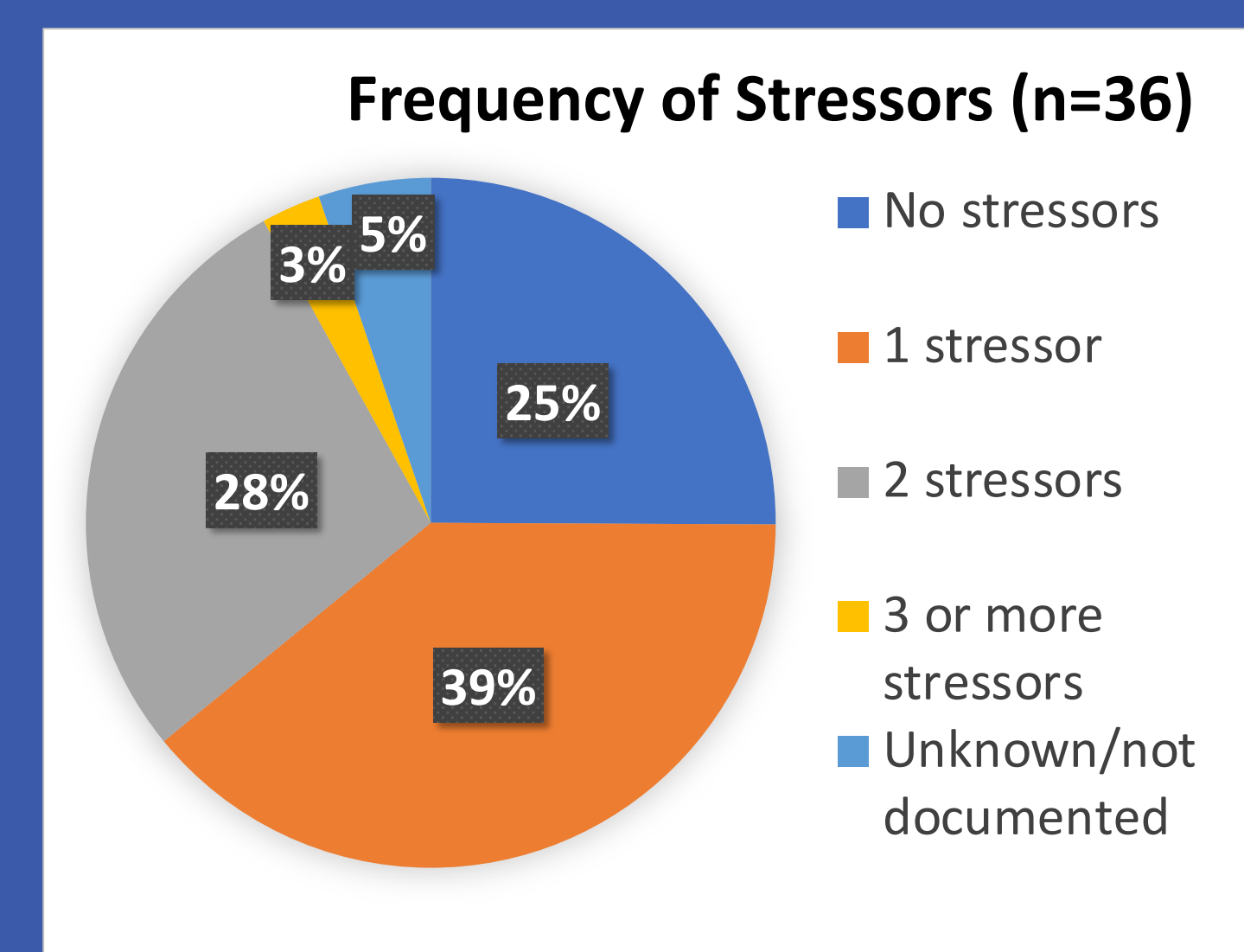
Substance Use



Physical Activity

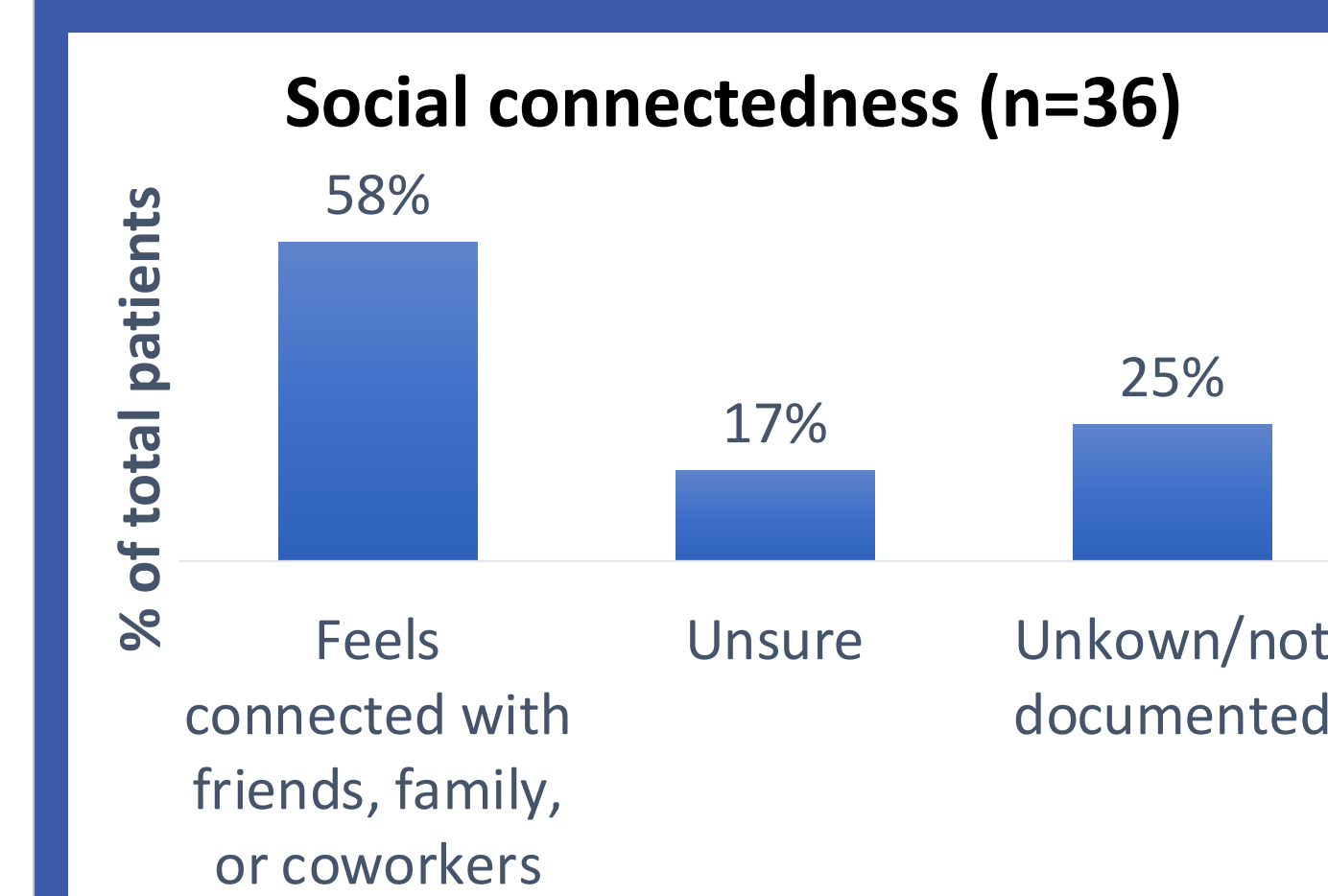


Stress



Social

Connectedness



Discussion & Conclusions

- While most of the patients were referred to the Lifestyle Medicine Clinic for 1 or 2 diagnoses, many patients have additional diagnoses listed in their charts which could benefit from lifestyle modification.
- Most of the patients are at relatively early stages of their disease processes and will likely benefit greatly from lifestyle modification. Out of the patients with obesity, 55% of patients had 1 or no comorbidities. Out of the patients with pre-DM and DM, most had an A1c consistent with pre-DM and those with DM had relatively well-controlled A1c values.
- Most patients reported at least 1 barrier to exercise, with the top barrier being physical restrictions (ex: pain, illness, disability). Given this data, provider screening for physical activity should take into consideration physical restrictions that may limit physical activity (i.e. pain, illness, disability) and should prompt referral to appropriate services such as physical therapy or chronic pain.
- In terms of diet, at baseline, our patients consumed more animal protein than plant protein for any given meal. This represents an important target for change given the tremendous health benefits of a plant-based diet.
- For sleep, out of the patients for which data were available, a little less than half of the patients sleep the recommended 7-9 hours. This may be normal given variability in sleep duration by age or may represent a true area for intervention.
- Lastly, our patient population has relatively low levels of stress and low substance use. Most of our patients feel connected to friends, family, and coworkers.

Limitations

Since our data were extracted from pre-existing EHR records, our study was limited by incomplete or missing documentation. Furthermore, many patient visits were conducted using telehealth which limited access to BMI and blood pressure data for our patient population.

Future Directions

Future studies will evaluate the outcome of interventions in the Lifestyle Clinic through analysis of data from follow up visits in each of the 6 key areas of Lifestyle Medicine.

References

- Inzucchi S, Lupsa B. Clinical presentation, diagnosis, and initial evaluation of diabetes mellitus in adults. UpToDate. Published online 2021.
- Katz DL, Meller S. Can we say what diet is best for health? Annu Rev Public Health. 2014;35(1):83-103.
- Lianov L. Physician competencies for prescribing lifestyle medicine. JAMA. 2010;304(2):202. doi:10.1001/jama.2010.903
- Maski K. Insufficient sleep: Evaluation and management. UpToDate. Published online 2021.
- Wexler D. Initial management of hyperglycemia in adults with type 2 diabetes mellitus. UpToDate. Published online 2021.