# Prevalence trends and demographic profiles of social anxiety disorder:
## A cross-sectional study using US National Health and Wellness Survey

Ross Baker[1], Josh Prince[1], Soohyun Hwang[2], Nikoletta Sternbach[2]

1 Vistagen; 2 Oracle Life Sciences

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## Introduction

The prevalence data for social anxiety disorder (SAD) are outdated and the demographics and mental burden among adults who experience SAD are not well understood. This study examined prevalence trends and explored demographic profiles and patient-reported outcomes among United States (US) adults that experienced SAD.

## Methods

Data from the 2006 (n=62,833) and 2023 (n=75,007) National Health and Wellness Survey, a cross-sectional, nationally-representative, online survey of US adults (aged ≥18 years), were analyzed. Participants self-reported experiencing SAD in the past 12 months, lifetime diagnosis of SAD, and currently using prescription to treat SAD. Results were weighted based on sex, age, race/ethnicity and education using population estimates from the US Census Bureau.

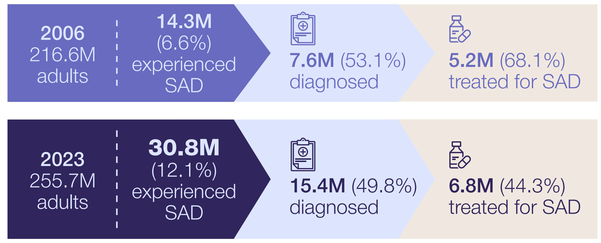
Measures: Patient-reported suicidal ideation was included using the Patient Health Questionnaire (PHQ–9)[1]. Quality of life was measured using RAND–36[2] mental health composite T score, which was composed of emotional well-being, social function, role limitations due to emotional problems, and energy/fatigue. WPAI scale was used to measure overall work productivity and activity impairment.[3] Higher mean % shows greater impairment with a range of 0 to 100.

Subgroups were compared using t-tests and chi-square tests as appropriate.

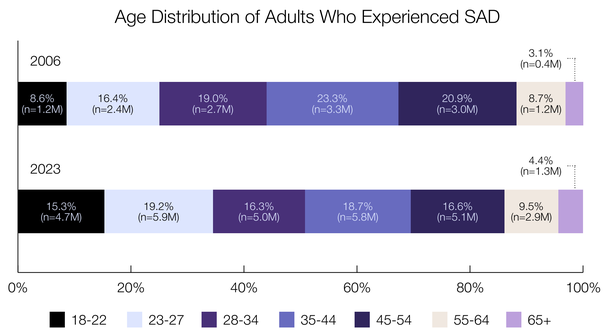
**Note:** the general population were uncorrected for other psychiatric comorbidities

## Results

Since 2006, the number of respondents who experienced SAD more than doubled, while the diagnosis rate stayed proportionately similar, and the treatment rate decreased by 35%.




Among those who experienced SAD, the proportion of patients has shifted in all age groups (2006 - 2023).




Similar trends were observed among subgroups of those who had been diagnosed with SAD and who had been treated for SAD.

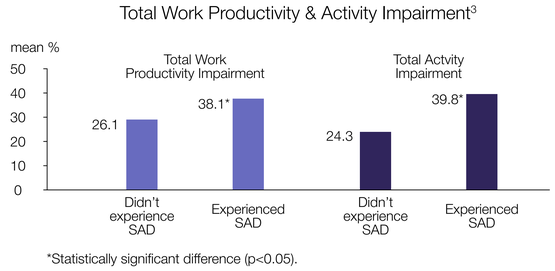
Gender

| | US Adult Population | Experienced SAD |
|---|---|---|
| Male | 48.1% | 37.8% |
| Female | 50.7% | 57.9% |
| Another gender | 1.0% | 4.0% |
| Decline to answer | 0.2% | 0.3% |

Race / Ethnicity

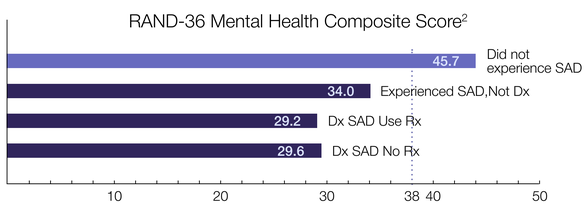
| | US Adult Population | Experienced SAD |
|---|---|---|
| Non-Hispanic white | 61.7% | 58.6% |
| Hispanic | 17.0% | 21.3% |
| African American | 12.2% | 10.4% |
| Asian | 4.9% | 3.2% |
| All Other | 4.2% | 6.4% |

Work impairment and activity impairment are approximately 50% higher in those that experienced SAD than in those that did not experience SAD.[3]

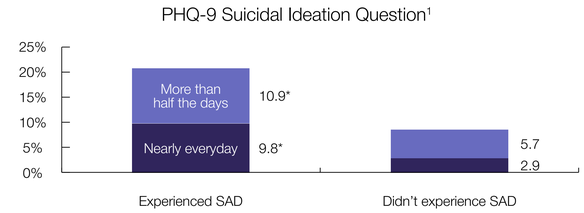



*Statistically significant difference (p<0.05).

The RAND-36 mental health score was at least 10 points lower in each SAD cohort compared to those without SAD, exceeding the clinically meaningful difference of 3-5 points. Additionally, scores below 38 in these cohorts suggest a higher likelihood of reporting psychological symptoms that may impact life functioning.[2]

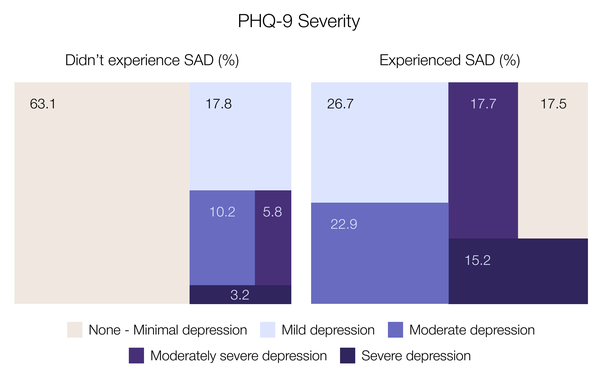



Respondents who experienced SAD were over twice as likely than those who did not experience SAD to have suicidal thoughts more than half the days or nearly every day over the past 2 weeks, not controlling for other comorbidities (20.7% vs. 8.6%, p<0.05)[1].




*Statistically significant difference (p<0.05).
Other answer options were 'several days' and 'not at all'

More than 80% of those experiencing SAD also reported mild to severe depression, with approximately 1/3 suffering from moderately severe/severe depression vs. less than 10% who didn't experience SAD.



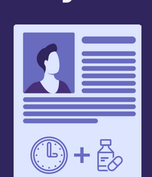

## References

1. PHQ-9: Kroenke, K., Spitzer, R.L., & Williams, J.B. (2001). The PHQ-9: validity of a brief depression severity measure. Journal of General Internal Medicine, 16606-613.
2. RAND SF-36: Hays RD, Prince-Embury S, & Chen H. RAND-36 Health Status Inventory. San Antonio, TX: The Psychological Corporation; 1998.
3. WPAI: Reilly MC, Zbrozek AS, Dukes EM. The validity and reproducibility of a work productivity and activity impairment instrument. PharmacoEconomics 1993; 4(5):353-65.

## Conclusions

- The prevalence of adults who experienced SAD increased over time, with the increase being largest among adults in the youngest age group (18–22 years).
- Although the rate of adults who experienced SAD increased over time, the rate of SAD diagnosis has not increased and treatment rates have decreased.
- More than 1 in 5 adults who experienced SAD reported suicidal ideation and worse mental health quality of life than the general US adult population.
- Over three quarters of those experiencing SAD reported mild to severe depression.

## Key Takeaway



**Promoting timely diagnosis and treatment** of social anxiety disorder is needed to improve various patient reported outcomes including physical and mental health, and work productivity. Approved treatments for SAD are limited, and new treatments are needed.