

ADHD During Perimenopause and Menopause



Jeanette Wasserstein, Ph.D.¹, Mary Solanto, Ph.D.², Gerry A Stefanatos, D.Phil.³





INTRODUCTION

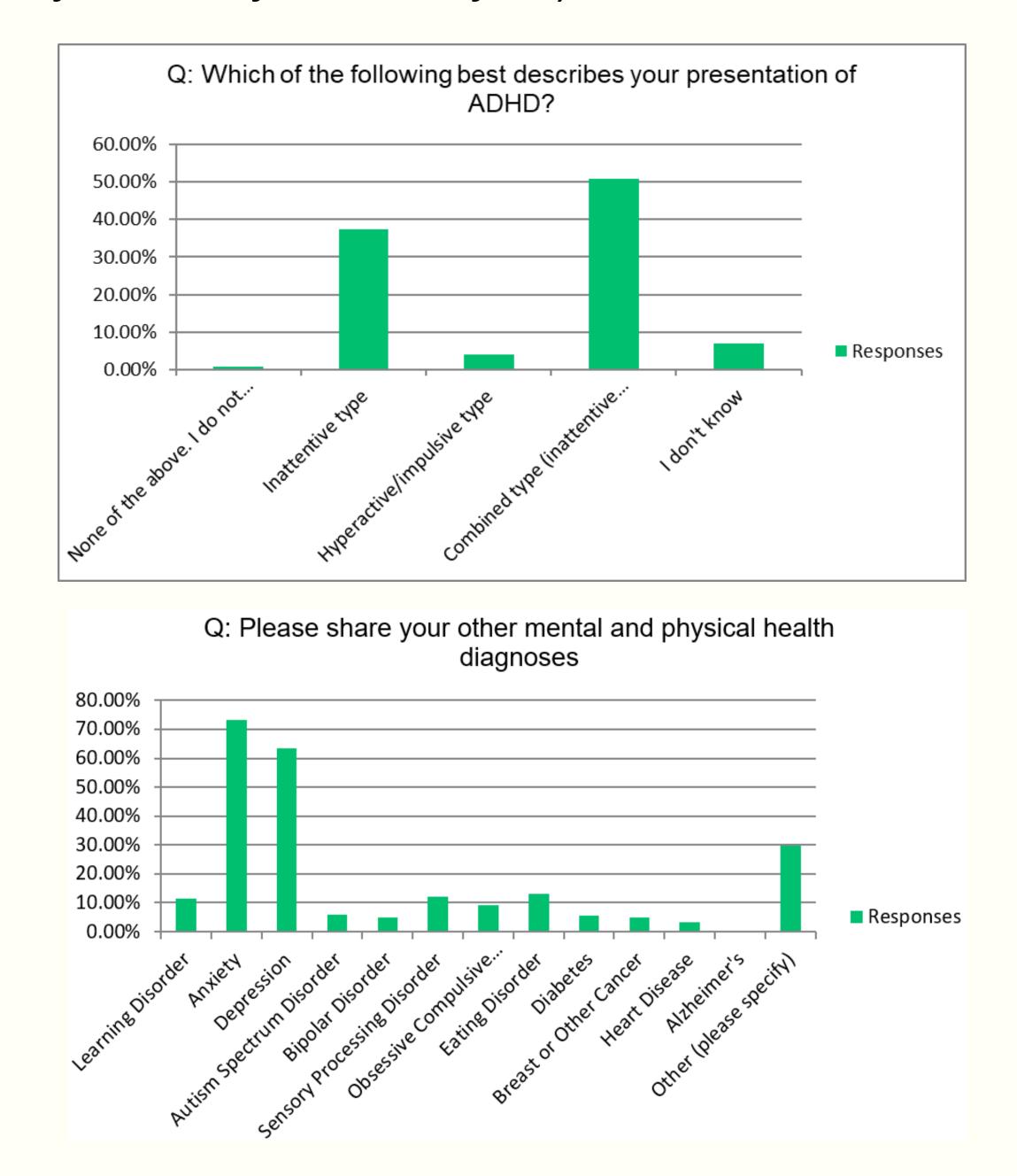
Hormones often have cognitive consequences that can disclose the role of that hormone in mediating brain development and function. There is little data regarding the impact of the hormonal changes of menopause on ADHD and associated symptoms ^{4, 5}. This study examines this issue.

METHODS

Participants

Information was obtained from a reader survey sponsored by ADDitude Magazine. Responses were received from 3,549 women who had experienced perimenopause or menopause, and of whom 81% had been diagnosed with ADHD. Participants:

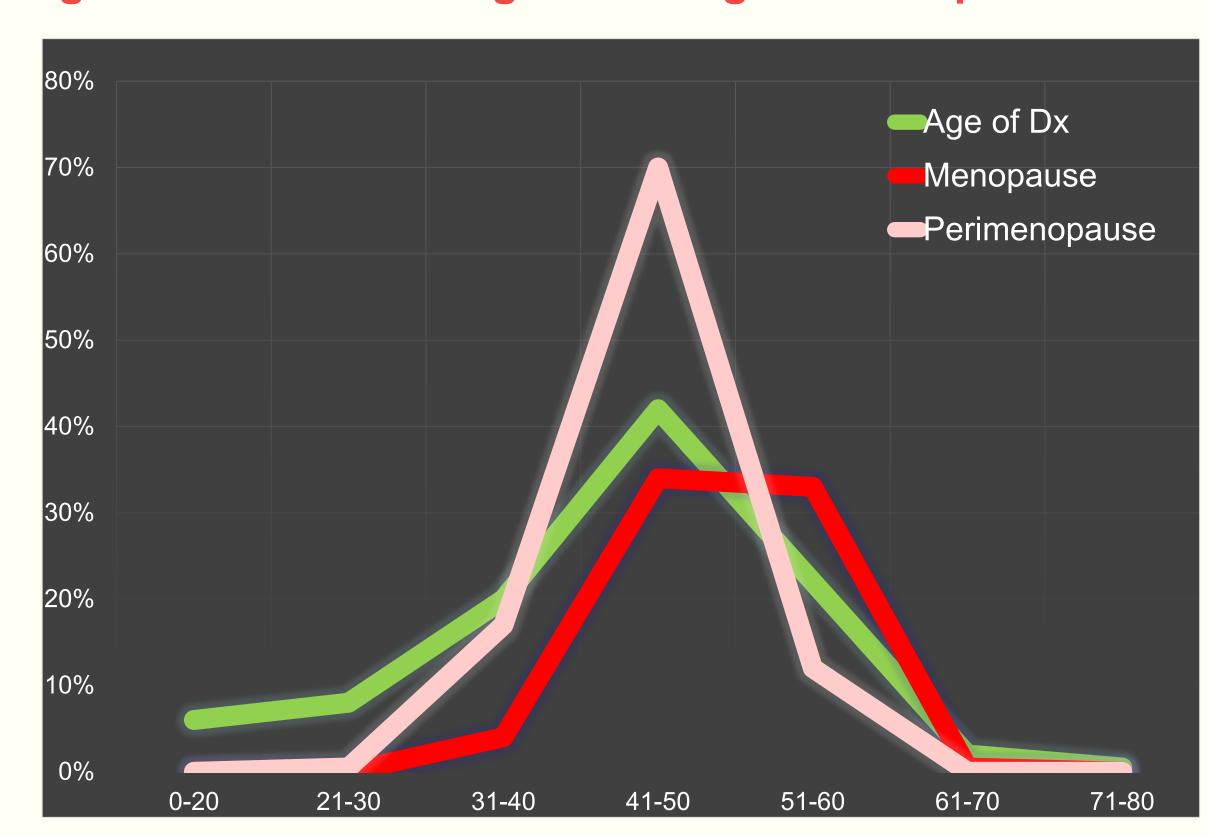
- ranged in age from 40 to 84 (median=52).
- were asked to indicate their age at diagnosis and the impact of each of 11 different symptoms or associated problems of ADHD at each of 5 time intervals: 0-9 years, 10-19 years, 20-39 years, 40-59 years and 60+years).



Approximately half of the sample self-reported the Combined Presentation, and approximately a third had the Predominantly Inattentive Presentation. Anxiety and depression predominated among the comorbidities, as is typically true for adults with ADHD⁶. The smaller percentages for autism, OCD, learning disabilities, and eating disorders are also typical of the adult ADHD population.

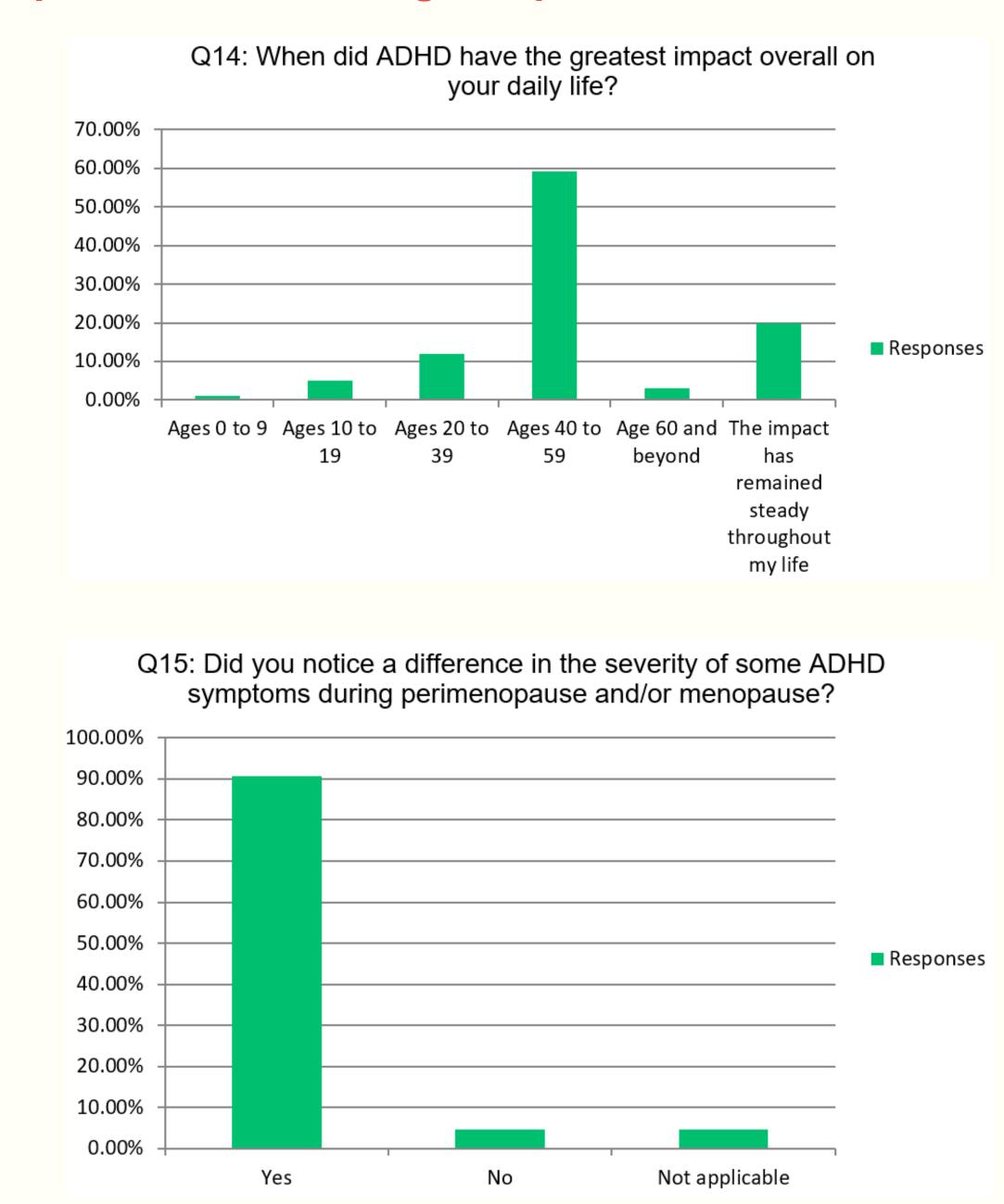
RESULTS

Age at First ADHD Diagnosis & Age at Menopause

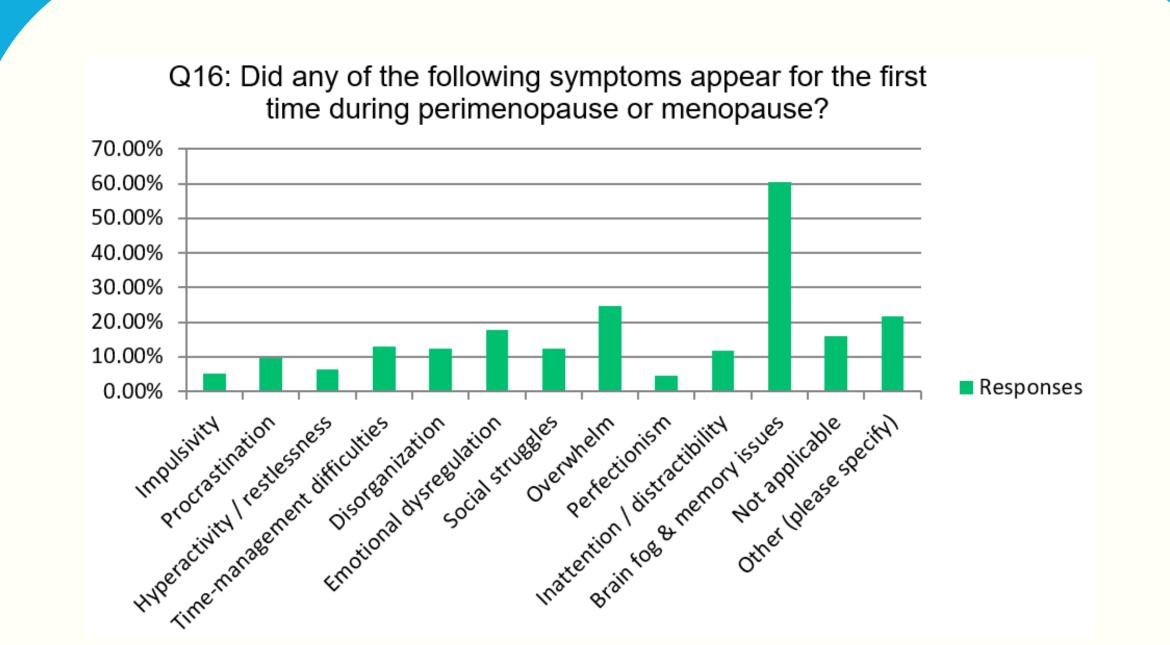


ADHD is diagnosed across the lifespan. However, diagnosis increases sharply in mid-adulthood, peaking in perimenopause and menopause, and follows a parallel course.

Impact of ADHD during this period

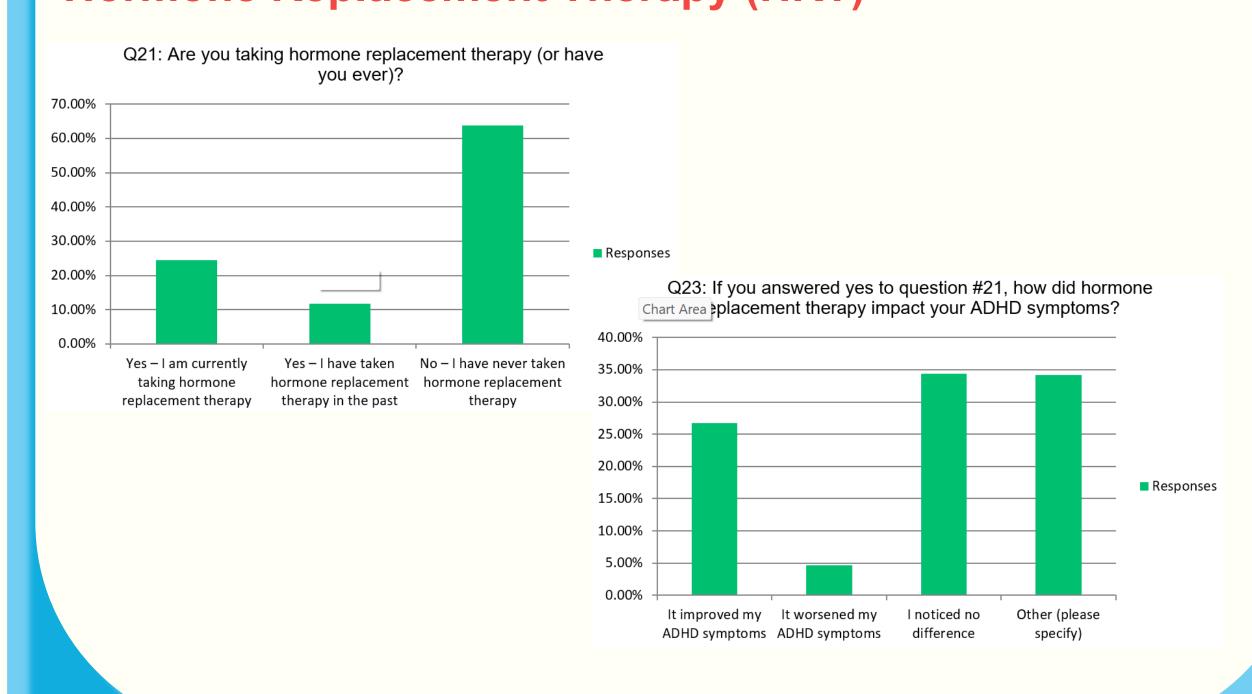


The vast majority reported the severity of ADHD symptoms increased during the peri/post-menopausal period. Similarly, the majority reported it had the greatest impact between 41 and 59.



The majority of women reported that "brain fog/memory problems" first appeared during the peri- and menopausal period. Other symptoms reported as increasing with onset of perimenopause included feeling overwhelmed and emotional dysregulation.

Hormone Replacement Therapy (HRT)



HRT appears to differentially impact symptoms of ADHD

- Close to half have tried or are currently taking HRT (n=1273).
- Of these, 27% noticed improvement in ADHD symptoms while 34% noticed no difference
- Approximately 5% reported worsening of symptoms with HRT

Limitations

- Respondents self-selected to participate in the study, possibly because they had been recently diagnosed with ADHD so the issue was more salient for them.
- Responses concerning presence and severity of symptoms earlier in the lifespan were retrospective and thus potentially unreliable.
- The apparent correlation between increase in ADHD symptom severity and onset of perimenopause/menopause may instead be a function of other changes associated with increasing age.

CONCLUSIONS

- The diagnosis of ADHD overlaps with hormonal changes in women, increasing sharply in midadulthood, peaking in perimenopause and menopause, and following a parallel course
- The cognitive symptoms of ADHD increase during perimenopause, especially problems with memory/brain fog, emotional dysregulation, and feelings of being overwhelmed
- Underlying hormonal fluctuations likely account for these associations, although other factors need to be considered
- > Hormonal manipulation could have therapeutic value
- Hormone fluctuations may contribute to a subset of those falling into the category of 'Adult Onset" ADHD

REFERENCES

4. Epperson, C. N., Shanmugan, S., Kim, D. R., Mathews, S., Czarkowski, K. A., Bradley, J., . . . Brown, T. E. (2015). New onset executive function difficulties at menopause: a possible role for lisdexamfetamine. Psychopharmacology (Berl), 232(16), 3091-3100.

5. Shanmugan, S., Loughead, J., Nanga, R. P., Elliott, M., Hariharan, H., Appleby, D., . . . Epperson, C. N. (2017). Lisdexamfetamine Effects on Executive Activation and Neurochemistry in Menopausal Women with Executive Function Difficulties. Neuropsychopharmacology, 42(2), 437-445.

6. Kessler, R. C., Adler, L. A., Barkley, R. A., Biederman, J., Conners, C. K., Demler, O., . . . Zaslavsky, A. M. (2006). The prevalence and correlates of adult ADHD in the United States: Results from the national comorbidity survey replication. American Journal of Psychiatry, 163(4), 716-723.