

# Examining differences in clinical and demographic characteristics of patients with post-traumatic stress disorder across adults and paediatric subgroups

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Poster P.1250



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## INTRODUCTION

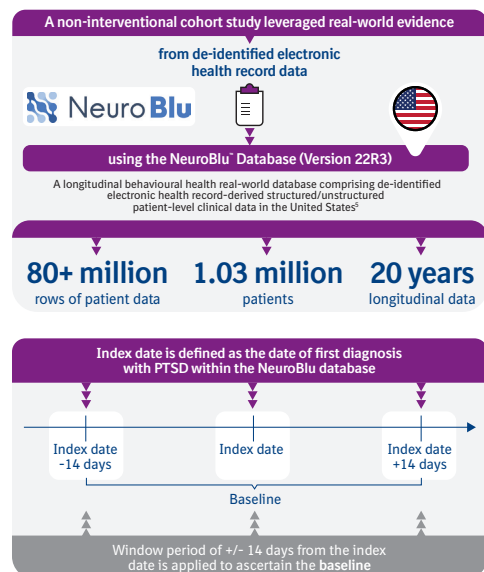
- CONTEXT** Post-traumatic stress disorder (PTSD) is a highly heterogeneous disorder, with substantial variation in symptoms and responses to standard-of-care treatments among patients<sup>1,2</sup>
- UNMET NEED**
  - Despite the substantial burden of PTSD,<sup>3</sup> no new pharmacotherapeutics have been approved by the FDA since sertraline and paroxetine 2 decades ago<sup>4</sup>
  - Pharmacotherapy is common in patients with PTSD, with a high proportion of patients receiving ≥1 medication(s), with or without psychotherapy; however, it is unclear if medications are prescribed for PTSD or comorbid condition(s)
  - It is unknown whether the demographics and clinical characteristics of adult and paediatric patients with PTSD differ based on their previous treatments
- STUDY AIM** To identify real-world insights into clinical presentation, treatment and outcomes of individuals with PTSD

## POSTER AIM

Here we present the clinical characteristics and demographics of adults and children with PTSD, and describe variations according to treatment

## METHODS

### STUDY DESIGN

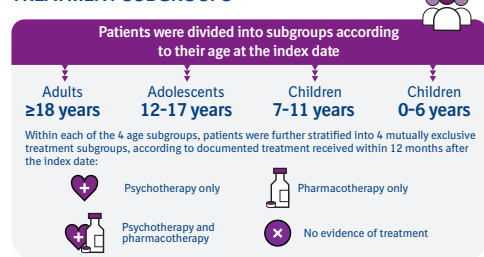


## KEY ELIGIBILITY CRITERIA

### INCLUSION CRITERIA

- Patients who received ≥2 PTSD diagnoses within 30 days between 2001 and 2020
- Patients from care sites with both inpatient and outpatient units

## TREATMENT SUBGROUPS



## DATA ANALYSES PERFORMED

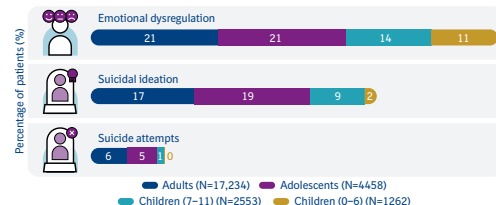
Descriptive statistics were used to examine the following measures overall and for each subgroup:

- Index date: Patient demographics
- Baseline: Patient clinical characteristics; psychosocial stressors (identified by applying natural language processing models on semi-structured data); psychiatric comorbidities; pharmacotherapies prescribed

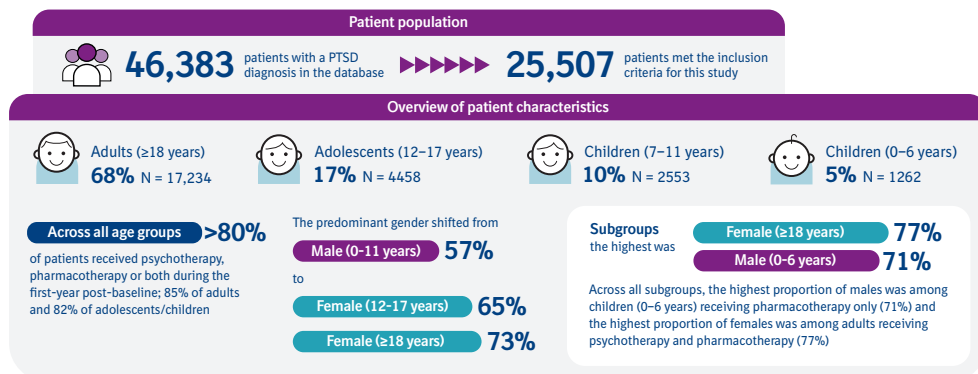
## KEY CONCLUSION

- Despite a substantial proportion of patients (>80%) receiving treatment, and the availability of 2 FDA-approved pharmacotherapeutics for PTSD, symptoms persist in many patients (Figure 1)
- These results highlight an unmet need for improved treatments in patients with PTSD

Figure 1. The percentage of patients with PTSD exhibiting emotional dysregulation, suicidal ideation and suicide attempts across age groups



## RESULTS

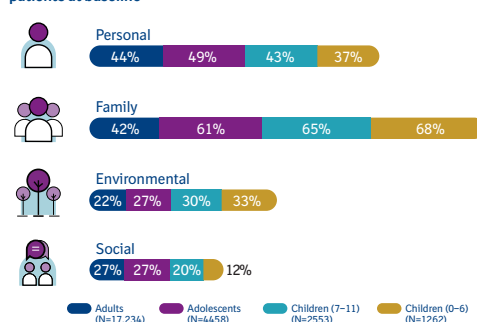


## PSYCHOSOCIAL STRESSORS

- Psychosocial stressors were prevalent in all age groups at baseline (Figure 2)
- Family-related stressors resulting from disruption of the family unit by separation or divorce and the lack of family support was higher in children and adolescents when compared to adults

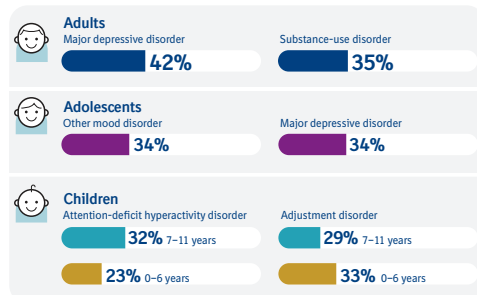


Figure 2. Most common psychosocial stressors experienced by patients at baseline



## PSYCHIATRIC COMORBIDITIES

The 2 most frequent comorbidities reported at baseline, by age group



## PHARMACOTHERAPEUTICS

- Trazodone, clonazepam, quetiapine and sertraline were the top 4 medications that were prescribed to approximately 14%, 14%, 13% and 9% of adults with PTSD at baseline, respectively (Figure 3)
- Medications prescribed could be to manage comorbid conditions rather than for PTSD, as reasons for dosing and agent choices are not captured in the database
- Although sertraline and paroxetine are both FDA-approved for the treatment of PTSD in the USA, neither were widely prescribed in this population of patients

Figure 3. Most common medications prescribed to adults with PTSD at baseline by treatment subgroup



## ADDITIONAL CONCLUSIONS

- Despite availability of 2 FDA-approved medications for PTSD in adults (sertraline and paroxetine),\* results indicate that other off-label psychotropic medications are frequently prescribed across all age groups of patients
- A better understanding of the demographic and clinical characteristics of patients with PTSD may help identify unmet patient needs and inform the design of future clinical research
- Data are limited by observations recorded within the care network captured in the NeuroBlu database, and it is possible that patients received treatments at care centres outside the catchment area of clinics represented in the database

## REFERENCES

- Zoellner LA, et al. *Depress Anxiety* 2014;31:297-306.
- Held P, et al. *J Psychiatr Res* 2021;141:228-32.
- Bisson J, et al. *BMJ* 2015;351:h4363.
- Kalmendil B, et al. *Clin Psychol* 2017;24(3):281-97.
- Patel R, et al. *BMJ Open* 2022;12:e005727.

## ACKNOWLEDGEMENTS

The authors meet the criteria for authorship as recommended by the International Committee of Medical Journal Editors. This study was funded by Boehringer Ingelheim International GmbH. Clinical and analytical support were provided by Holmusk Technologies, Inc. Writing, editorial support and formatting assistance for this poster were provided by Fishback Communications Ltd, part of Fishback Health, funded by Boehringer Ingelheim International GmbH.

## DISCLOSURES

SA, SSR, LZ and IA are employees of Boehringer Ingelheim. YWH, LAW, KAPVC, JGW, SK and LTL report employment with Holmusk Technologies, Inc. LAW reports equity ownership in Holmusk Technologies, Inc.



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