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Quality of Life and Work Impacts among Caregivers of Patients with Chronic Myeloid Leukemia (CML) – A Caregiver Survey in the US

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KEY FINDINGS & CONCLUSIONS

- Caring for patients with CML, especially when those patients experience AEs, imposes a significant burden on caregivers, resulting in high work productivity impairment and decreased quality of life
- Caregiver burden when caring for patients with CML is as extensive as caring for patients with other cancers
- Findings from this study highlight the need for more tolerable treatment to lessen the burden of caregivers and address their unique challenges in CML management



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BACKGROUND & OBJECTIVES

- Caregivers play a pivotal role in the management of patients with CML, which
 may be accompanied by emotional or physical burden and impact on their
 work productivity
- The patients they care for with CML treated with tyrosine kinase inhibitors (TKIs) often experience intolerance associated with adverse events (AEs) which may add to the caregiver burden¹
- This study assessed the level of caregiver burden and evaluated the impact of TKI-related AEs experienced by patients with CML on the quality of life (QoL) of their caregivers using caregiver-reported outcomes

METHODS

- A cross-sectional web-based survey of unpaid caregivers of adult patients with CML treated in US clinical practice was conducted from June to November 2024
- Eligible caregivers were adults (≥18 years old) who were caring for a patient receiving an ATP-competitive TKI for at least 3 months as first or second treatment for CML at survey completion
- Asciminib, a selective allosteric inhibitor binding the myristoyl pocket of ABL1, was not indicated in this setting at the time the study was initiated; asciminib was recently approved in the US for newly diagnosed CML in chronic phase, previously treated, and with T315I mutation (October 2024), following approval in patients previously treated with two prior lines (October 2021)²
- Data were collected from the caregiver perspective using the CareGiver Oncology Quality of Life (CarGOQoL; range 0-100; higher scores indicate better QoL)^{3,4} and the Work Productivity and Activity Impairment adapted for caregivers (WPAI:CG; higher percentages indicate more impairment)⁵ questionnaires
- This study was exempt by the Pearl Institutional Review Board (IRB) under 45 CFR 46.104(d)(2)

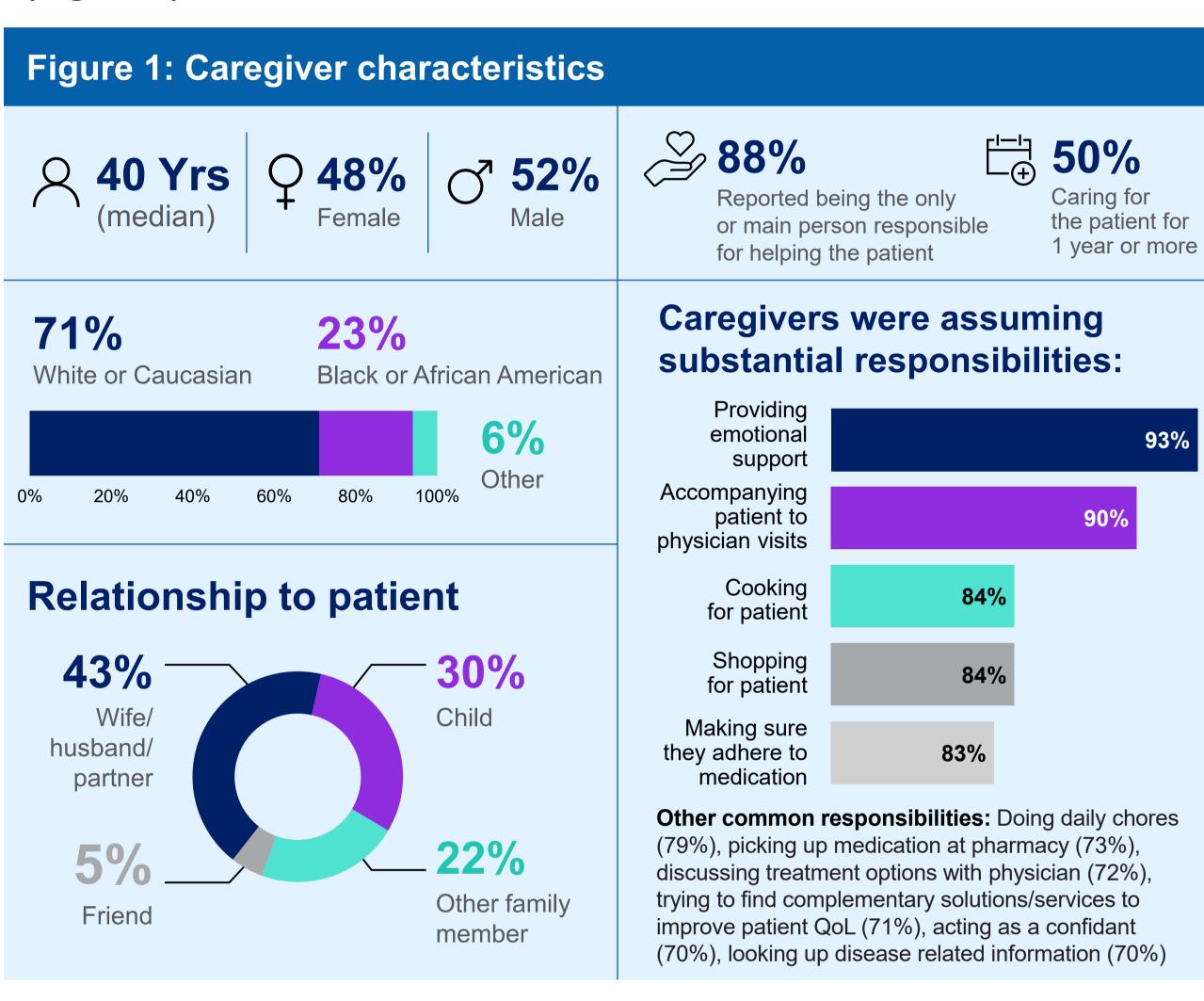
RESULTS

1 year to < 2 years

2 years or more

Caregiver Characteristics

A total of 100 caregivers of patients with CML participated in the survey (Figure 1)



Characteristics of Patients Being Cared For

Patients being cared for, from the caregiver perspective, were generally older, had poorer health status, and were less likely to be employed than those without a caregiver⁶ (Figure 2)

Figure 2: Patient characteristics (caregiver-reported) Type of TKI: Q 52 Yrs Q 53% ♂ 47% 1st Gen 3rd Gen Overall Black or African American include dasatinib, nilotinib and bosutinib; 3rd Gen TKI includes ponatinib **AEs experienced in 4 weeks** prior to survey ■ Four or more ■ Three ■ Two ■ One ■ None **Employment -41% Status** Not employed Employed (full time Only 10% of patients did not experience any AEs On disability during the previous month Time since diagnosis Most common AEs (Top 5) 3 months to < 6 months 8% Fatigue Muscle pain 6 months to < 1 year Nausea

Joint pain

Anxiety

Other common AEs: Headache

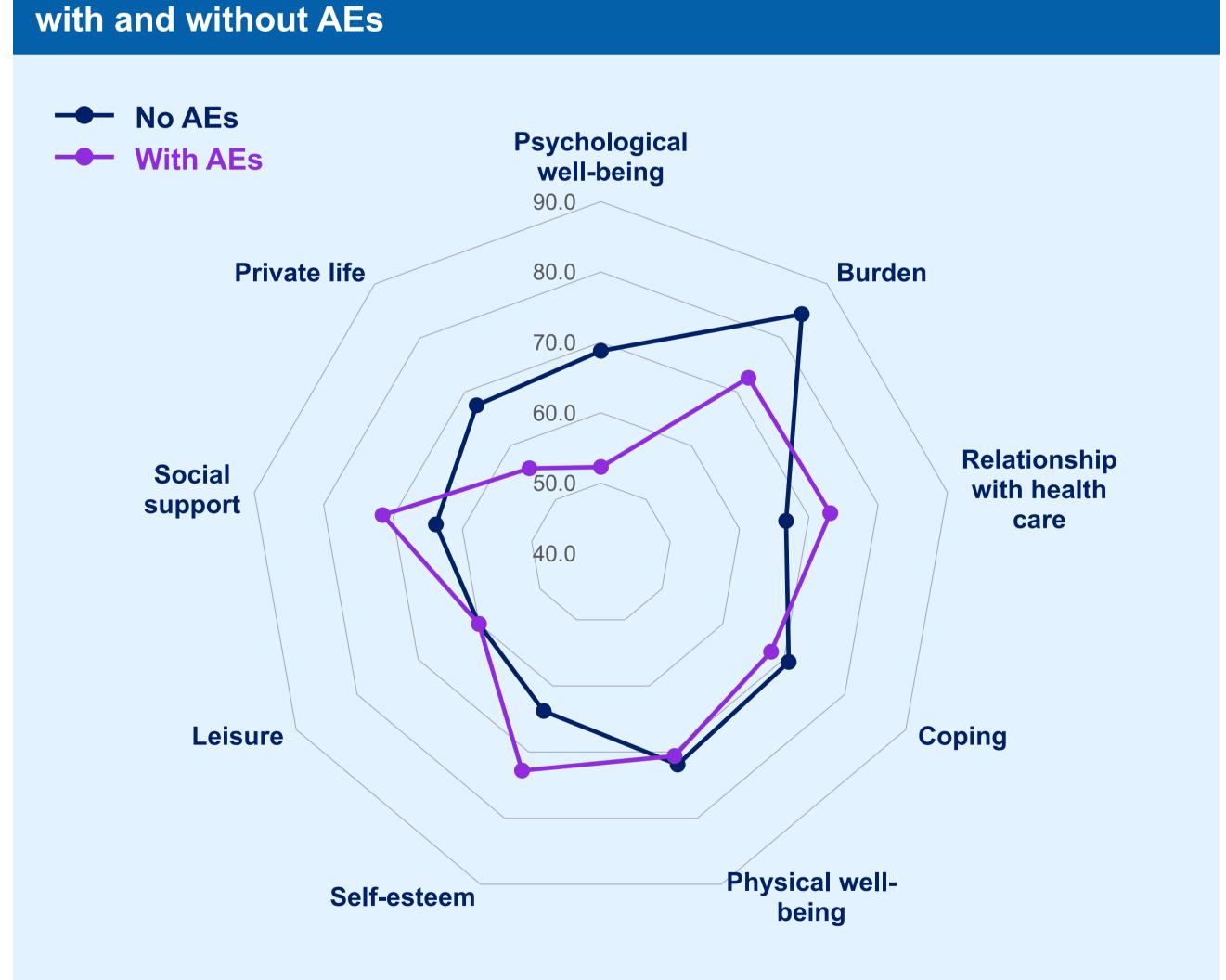
(17%), constipation (15%),

diarrhea (14%), cough (14%)

High Caregiving Burden Among Caregivers of CML Patients (Figure 3)

- Scores from the CarGOQoL indicate that caring for patients with CML is as burdensome as caring for patients with other cancers (e.g., lung, breast, colon)⁷. The most impacted domains were psychological wellbeing (mean 53.9), private life (mean 57.0), leisure (mean 60.0), and coping (i.e., feeling guilt, helplessness, injustice, anger; mean 68.2)
- Caring for patients with AEs exacerbated the caregiver burden particularly for the domains of psychological well-being, burden (i.e., feeling lack of freedom, bothered by feeling of being confined, life entirely devoted to care recipient, or embarrassed to be the only person providing assistance), and private life

Figure 3: CarGOQoL scores for caregivers of patients

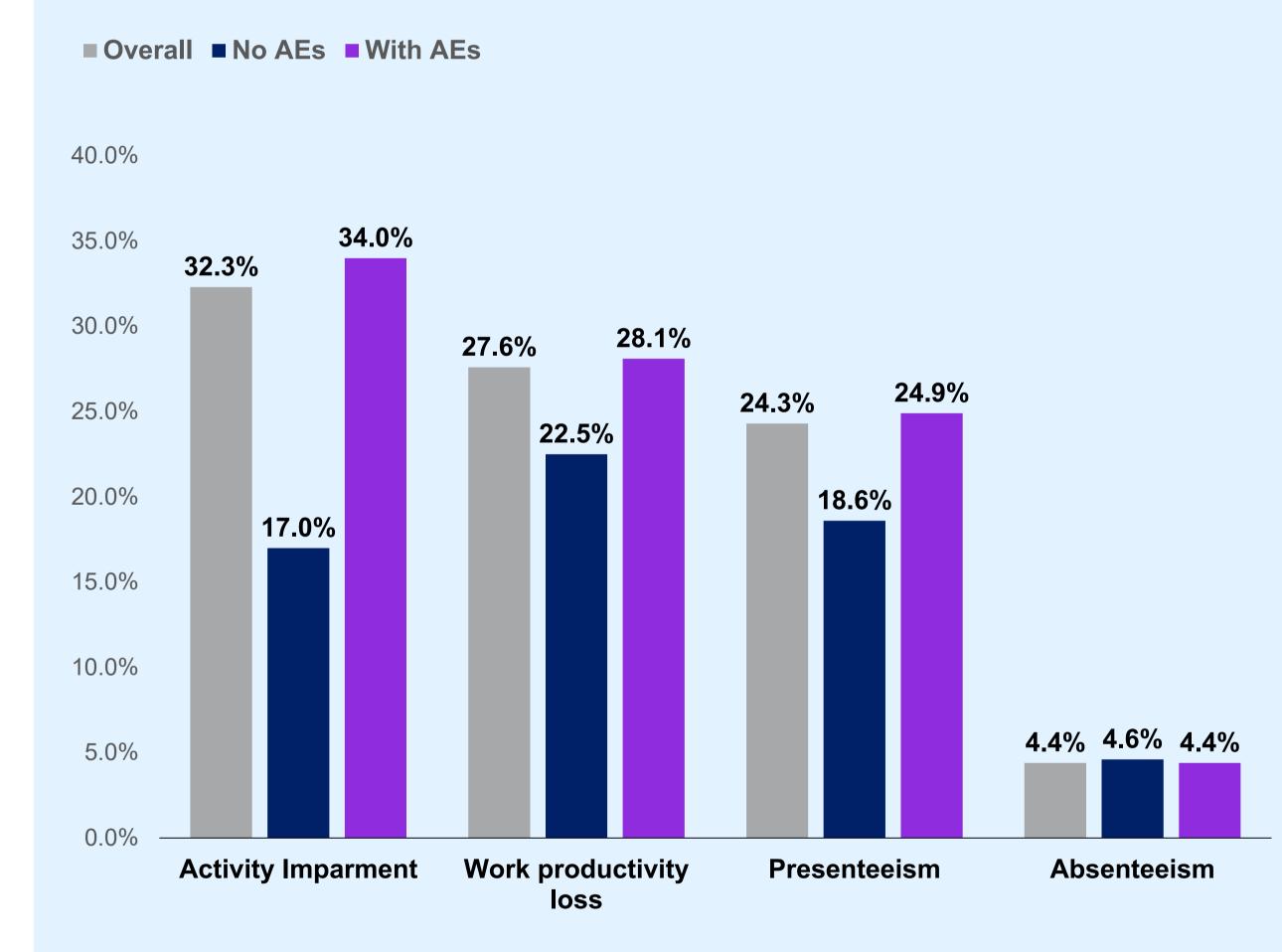


Notes: The recall period is the last 4 weeks; Higher scores indicate better quality of life; Questions on burden include whether the caregiver has felt a lack of freedom, been bothered by the feeling of being confined, been bothered by the fact that their life was entirely devoted to the care recipient, or been embarrassed to be the only person to provide assistance; Questions on coping include whether the caregiver has experienced feelings of guilt, been bothered by a feeling of helplessness against disease, or felt a feeling of injustice, anger, or rebellion.

Extent of Work Productivity and Activity Impairment in Caregivers

- Based on the WPAI:CG, mean activity impairment resulting from caring for a person with CML was 32.3% (Figure 4)
- Most caregivers (79%) were employed, and almost half (42%) reported change of employment since they started to care for the person specifically due to their carer responsibilities because of CML
- Among employed caregivers, almost all (94%) reported some productivity loss (overall work impairment) due to CML, with a mean percent overall work impairment of 28% and presenteeism (impairment while working) of 24%; absenteeism was reported at a mean of 4.4%
- For caregivers of patients with AEs, activity impairment, presenteeism, and work productivity loss were even more pronounced than those without observed AEs

Figure 4: Work Productivity and Activity Impairment Adapted for Caregivers – impairment percentages



Notes: The recall period is the last 7 days; A higher percentage indicates greater impairment and less productivity; Percent activity impairment was assessed among the total sample, regardless of employment status; Absenteeism was assessed among employed participants at the time of the survey; Presenteeism and work productivity loss were assessed among employed participants who worked > 0 hours in the past 7 days.

LIMITATIONS

- Caregivers of patients with more severe disease may be under-represented as they may be less likely to participate in a survey
- The impact of AEs experienced by patients with CML on the overall caregiver burden may be underestimated when limited to the time of the survey completion
- Findings may not be generalizable to the overall caregiver population caring for patients with CML in the US

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