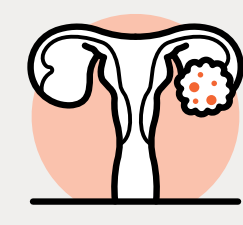


VOCAL (Views of Ovarian Cancer Patients and Their Caregivers – How Maintenance Therapy Affects Their Lives) Study: Cancer-Related Burden and Quality of Life of Caregivers

Soham Shukla¹, Joanna de Courcy², Hilary Ellis², Gary Milligan², Teresa Taylor-Whiteley², Amanda Golembesky³, Dana M Chase⁴

¹Value Evidence and Outcomes, GSK, Collegeville, PA, USA; ²Adelphi Real World, Macclesfield, UK; ³Value Evidence Oncology, GSK, Research Triangle, NC, USA; ⁴Gynecologic Oncology Division, Creighton University School of Medicine, Phoenix, AZ, USA.

Background



Providing care for patients with cancer can affect the quality of life (QoL) of caregivers in numerous ways, including psychologically and financially;^{1,2} however, the QoL of caregivers of patients with ovarian cancer (OC) has received limited focus.

Aim

To evaluate sociodemographic characteristics and the burden of caregiving amongst caregivers of patients with OC.

Methods

Study design

The VOCAL study included an observational, cross-sectional survey of main caregivers of patients with OC in the USA.

Study population

Caregivers were identified through patient advocacy groups and physician-led or panel recruitment.

Inclusion criteria:

- Caregiver for a close relative or friend who has advanced OC.
- ≥18 years of age.
- Not paid a wage to care for the patient.

Data collection and analysis

Structured surveys of approximately 25 minutes duration were completed online by caregivers between 14 January 2021 and 12 April 2022. Descriptive statistics are reported here.

Outcomes:

- Baseline demographics.**
- Day-to-day responsibilities** (including length of time caring for patient and the type of support provided to patient).
- Human impact** (including Zarit Burden Interview [ZBI] responses and distance/time spent travelling in relation to caregiving).
- Health-related QoL** (including The Care-related Quality of Life on Seven Burden Dimensions [CarerQoL-7D] and EQ-5D-3L questionnaires responses).
- Work impact** (including the Work Productivity and Activity Impairment [WPAI] questionnaire responses, employment status and work limitations owing to caregiving responsibilities).
- Financial impact** (including income and monthly household/caregiving expenses).

Results

Baseline caregiver demographics

- In total, 80 caregivers completed the survey; baseline demographics are shown in **Table 1**.
- Median age was 46.0 years (ages ranging from 19 to 75 years).
 - Caregivers were mostly partners/spouses (56%; n=45) or adult children of the patient (29%; n=23).
 - One in four caregivers experienced a change in living situation due to the OC diagnosis (25%; n=20).

Caregiver demographics reflect a diverse study sample and emphasise the important role of the spouse as a caregiver for patients with OC.

Table 1. Baseline caregiver demographics

N=80		
Age, median (range), years 46 (19–75)	Gender at birth, n (%) * Male 45 (56) Female 34 (42)	Living situation changed due to OC diagnosis, n (%) Yes 20 (25) No 60 (75)
Ethnic origin, n (%) † White 44 (55) Non-White 29 (36) Black/African American 16 (20) Hispanic and Latino 8 (10) Other‡ 5 (6)	Relationship to patient, n (%) Partner/spouse 45 (56) Daughter/son 23 (29) Other family relation 8 (10) Friend/other 4 (5)	Adults (≥18 years of age) in household, n (%) Caregivers who live alone 6 (8) Caregivers who live with at least one adult 74 (92)
Children (<18 years of age) in household, n (%) Caregivers with no children at home 40 (50) Caregivers with one child at home 18 (22) Caregivers with two or more children at home 22 (28)	Current treatment strategy/regimen of patient receiving care, n (%) No medication – active surveillance 34 (42) IV-Q3W 11 (14) IV-Q3W and oral BID 5 (6) IV-Q3W and oral QD 4 (5) Oral QD 11 (14) Oral BID 7 (9) IV chemotherapy 8 (10)	

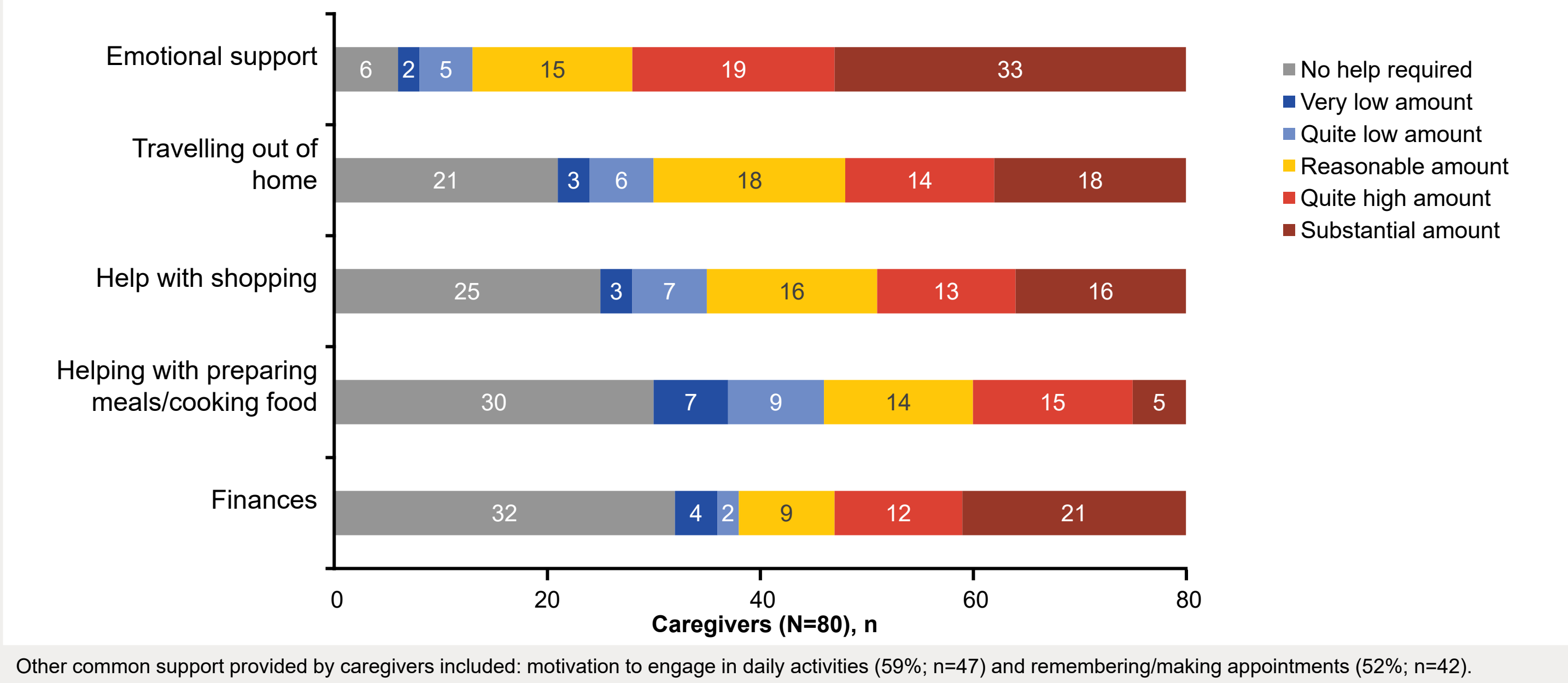
*1 caregiver selected 'prefer not to say'; 17 caregivers selected 'prefer not to say'; †Consisting of caregivers who selected American Indian/Alaskan Native (n=2), Asian (n=2) and Black/African American and Hispanic and Latino (n=1) ethnic origins. BID, pill/tablet/capsule twice daily; IV, intravenous; IV-Q3W, intravenous infusion every 3 weeks; OC, ovarian cancer; QD, pill/tablet/capsule once daily.

Day-to-day responsibilities

On average, caregivers had been looking after the patient for over 2 years; mean (standard deviation [SD]) 26.9 [31.4] months.

Of the caregivers who did not live with the patient (19%; n=15), most travelled to the patient by car (79%; 11/14) and more than half travelled 5 miles or more (53%; 8/15).

Figure 1. Support provided by caregivers (five most common support activities)



Human impact

According to ZBI scores, almost one-third (33%; n=26) of caregivers reported their level of burden as either moderate-to-severe or severe.

Caregivers helped patients attend to health appointments (mean [SD]) 3.9 (6.7) times/month, with most taking patients to ≥1 appointment/month (79%, n=63); their mean (SD) journey time was 202 (272.9) minutes.

Figure 2. Summary of ZBI global score ratings

No burden 0–20	Mild to moderate 21–40	Moderate to severe 41–60	Severe 61+
42% (n=34)	25% (n=20)	20% (n=16)	13% (n=10)

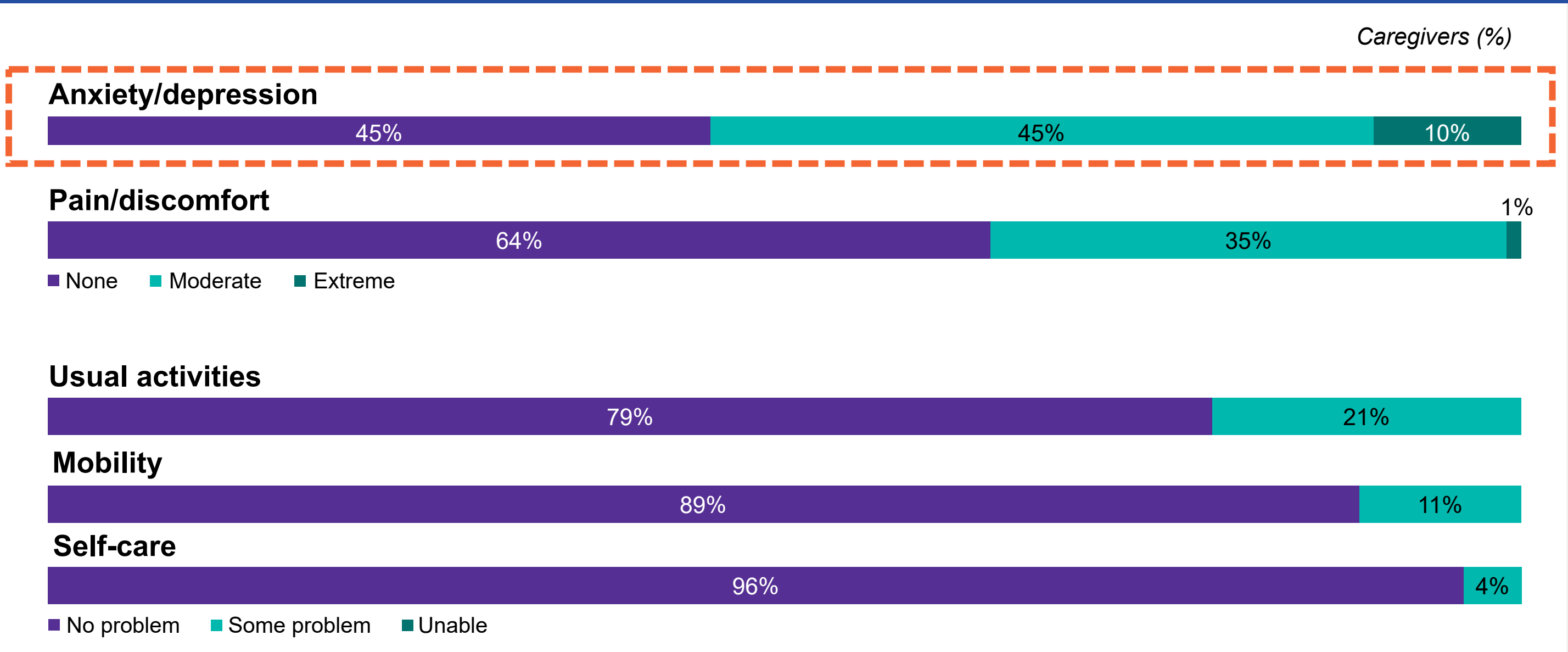
ZBI, Zarit Burden Interview.

Health-related QoL

The mean (SD) CarerQoL-7D Questionnaire US Tariff Score, ranging from 0 (worst informal care situation) to 100 (best informal care situation), was 73.8 (21.4).

The results of the EQ-5D-3L questionnaire showed that **over half of caregivers reported having moderate or extreme anxiety/depression** (45% and 10% [n=36 and n=8], respectively).

Figure 3. Summary of EQ-5D-3L responses



Work impact

Table 2. Impact of care on work

Work impact, (%)	
Reduced hours of work due to care	47% n=31/66
Stopped any voluntary/unpaid work due to care	40% n=23/58
Reduced the number of hours of voluntary/unpaid work due to care	33% n=17/51
Voluntarily stopped working due to care	30% n=20/67
Been fired/made to stop work due to care	7% n=4/61
Early retirement due to care	6% N=4/63

Most caregivers reported being currently in employment (62%; n=50); the mean (SD) hours worked each week being 28 (13.4) hours.

A considerable proportion of caregivers reduced or stopped work due to care responsibilities.

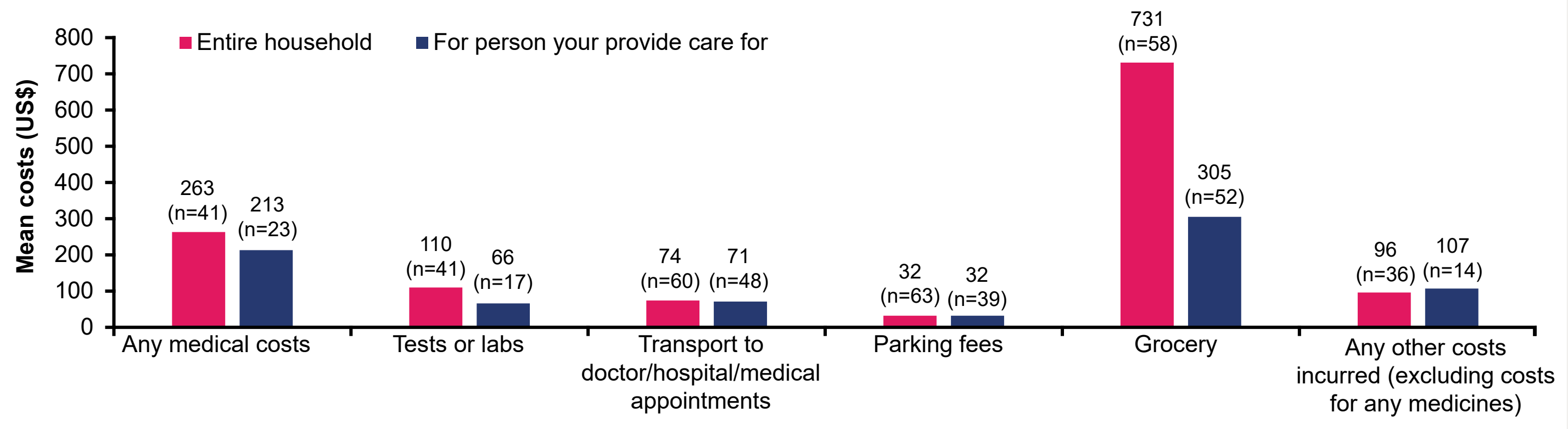
*Percentages are calculated from caregivers who responded either "yes" or "no" only; caregivers who responded "n/a" were not included in the calculation.

Financial impact

Caregivers' annual income varied widely (from <US\$5000 to >US\$200,000); however, nearly one-third of caregivers (30%; n=24) preferred not to disclose their income.

A substantial proportion of the caregivers' household costs were spent on the patient. For example, mean monthly patient medical costs were 81% of the medical costs for the entire household.

Figure 4. Monthly mean costs (US\$) for caregivers



Conclusions

The caregiver burden in OC is considerable, with caregivers reporting high levels of anxiety/depression, a negative impact on work and finances, and reduced QoL.

Most caregivers were immediate family members, one in four caregivers changed living situation due to the OC diagnosis and a substantial proportion of household costs were spent on the patient.

The current data emphasise an urgent need for healthcare providers to consider the multiple difficulties faced by caregivers of patients with advanced OC.

Further investigations are needed to identify interventions that may support caregivers in providing care.

Disclosures

SS and AG are employees of GSK. JdC, HE, GM and TTW are employees of Adelphi Real World. DMC declares advisory/consultancy for AstraZeneca, Clovis Oncology, GSK; speaker bureaus for AstraZeneca and GSK, Merck, Seagen; and travel/accommodation/ expenses from AstraZeneca, GSK.

Acknowledgments

This study was funded by GSK (study number GSK213815). Medical writing support was provided by Nicholas Thomas, PhD, at Fishawack India, UK, part of Fishawack Health, funded by GSK. The authors would like to thank Dr Stephanie Wethington for her contributions to the study and the corresponding abstract.

HE was unable to approve the final version of this poster but co-authored the abstract.

References

- Hartnett J, et al. *Clin J Oncol Nurs* 2016;20(2):169–73.
- Petricone-Westwood D, et al. *Curr Oncol* 2021;28(4):2950–60.

Presenting author email address: soham.h.shukla@gsk.com