

BRIEF REPORT

Caregiver burden among adults caring for their Holocaust-survivor parents during the COVID-19 pandemic

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Abstract

This study aimed to examine the caregiver burden among offspring of Holocaust survivors (OHS) caring for their parents during the COVID-19 pandemic, hypothesizing that caregivers whose parents suffer from posttraumatic stress disorder (PTSD) would report an increased burden. The sample consisted of 109 caregivers with older adult care recipient parents (average caregivers' age = 57.67, $SD = 8.49$). Caregivers were divided into three groups: 20 OHS who reported that at least one care recipient had PTSD, 60 OHS who reported that their care recipients did not have PTSD, and 29 comparison caregivers (whose care recipients did not undergo the Holocaust). Caregivers completed questionnaires about SARS-CoV-2 exposure, COVID-19 concerns, helping their care recipients, their experiences of caregiver burden, and perceived changes to their caregiver burden during the pandemic. The caregivers also reported PTSD symptoms—in themselves as well as in their care recipients. Relative to comparisons, OHS with parental PTSD reported higher caregiver burden in four aspects: time-dependent burden, developmental burden, physical burden, and social burden. Furthermore, OHS reported a greater perceived increase in caregiver burden during the pandemic than the comparisons. The study findings illuminate the difficulties OHS caregivers, especially those whose care recipients have PTSD, face during the COVID-19 pandemic. This group of caregivers is at risk of experiencing more distress and may need help and support. Further research is needed to determine whether people taking care of their posttraumatic parents following other massive traumatic events also feel a heavier caregiver burden—both in general and specifically during the current pandemic.

Key words: Holocaust survivors, adult offspring, caregiver burden, COVID-19

Holocaust survivors and their children generally show signs of resilience under normal circumstances but may suffer from increased psychological vulnerability in adverse circumstances (Shmotkin *et al.*, 2011). Thus, Holocaust survivors have displayed greater psychological distress in times of war and when facing illness (Shmotkin *et al.*, 2011). Furthermore, it seems the intergenerational transmission of trauma results, among other things, in hypersensitivity in times of crisis among offspring of Holocaust survivors (OHS).

Many OHS are currently taking care of their aging parents. Shrira *et al.* (2019) found that OHS whose parents had PTSD reported assisting their parents more with physical and medical care, as well as with

instrumental help than offspring whose parents did not undergo the Holocaust. This may suggest that some OHS bear a heavier emotional burden in the context of caring for their parent. Indeed, OHS whose parents had PTSD reported higher levels of filial anxiety (anxiety related to caring for one's parents) and filial obligation than offspring whose parents did not undergo the Holocaust, wherein the sense of filial obligation mediated the relationship between parental PTSD and offspring filial anxiety (Shrira *et al.*, 2019).

The aforementioned study was performed before the outbreak of COVID-19. The COVID-19 pandemic has—among its numerous effects—impacted the emotional state of old people in general and Holocaust survivors in particular. Thus, for instance, Holocaust survivors with PTSD were found to have higher COVID-19 anxiety and increased levels of loneliness during the pandemic (Maytles *et al.*, 2021).

The pandemic may have increased the caregiver burden experienced by OHS taking care of their

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parents. For instance, people taking care of their parents (Archer *et al.*, 2021) reported an increase in their caregiver burden during the pandemic. Based on previous findings (Shrira *et al.*, 2019), caring for Holocaust survivors during the COVID-19 pandemic may prove even more complicated when the survivors have PTSD.

The current study examines caregiver burden among caregivers taking care of their parents during the COVID-19 pandemic. The first hypothesis was that OHS who reported that their care recipients had PTSD would report a heavier caregiver burden compared to OHS who reported that their care recipients did not have PTSD, and relative to comparisons whose care recipients are not Holocaust survivors. The second hypothesis was that relative to the other groups, OHS with parental PTSD would perceive a greater increase in caregiver burden when asked to compare their pre-pandemic burden to current burden.

Method

Participants and procedure

The sample consisted of 109 Israeli Jewish adult caregivers born after 1945, whose parents, all European descent, were born before 1945. Each caregiver had at least one living parent care recipient. The caregivers were divided into three groups: 20 OHS reporting to have at least one care recipient with PTSD, 60 OHS reporting that none of their care recipients suffer from PTSD, and a comparison group of 29 caregivers whose care recipients had not gone through the Holocaust and did not have PTSD (see Table 1 for the three groups' demographics).

The data were collected from caregivers throughout Israel between November 9, 2020, and February 15, 2021. During this time, COVID-19 morbidity in Israel was at an all-time high. Caregivers were recruited on social media and via organizations supporting Holocaust survivors. Caregivers completed an online questionnaire after consenting to volunteer for a study approved by an ethics committee at Bar-Ilan University.

Measures

Caregivers reported sociodemographic information and were asked which country their care recipients had been born in, had they lived under a Nazi or pro-Nazi regime, and where they had been during the war. Additionally, caregivers completed several questionnaires relating to their care recipients (e.g. the care recipient's age, the level of support

provided by the caregiver, etc.). Caregivers also completed a 6-item scale about helping the care recipient (based on Lawton and Brody, 1969). Items ranked on a scale of 1 (*not helping at all*) to 5 (*helping all the time*). The final score was the ratings' average (Cronbach's $\alpha = .77$).

The multidimensional caregiver burden inventory (Novak and Guest, 1989), which includes 24 items measured the caregiver's feelings about taking care of their care recipient during the COVID-19 pandemic. Items were rated on a scale of 0 (*never*) to 4 (*almost always*). The questionnaire consisted of five subscales, with the final score calculated as the ratings' average in each subscale: time-dependent burden ($\alpha = .86$), developmental burden ($\alpha = .83$), physical burden ($\alpha = .72$), social burden ($\alpha = .74$), and emotional burden ($\alpha = .78$).

Four items measured the perceived change in caregiver burden because of the COVID-19 pandemic. The items were worded especially for the current study and rated on a 5-point scale from -2 (*became much worse*) to 2 (*became much better*). These referred to the change in caregiver burden, the quality of the child-parent relationship, the quality of the relationship between the care recipient and her/his friends and family, and the care recipient's ability to access day-to-day errands.

A SARS-CoV-2 exposure questionnaire (Bergman *et al.*, 2020), in which caregivers were asked about five events related to SARS-CoV-2 exposure. The score represented the number of exposure events participants had experienced.

A COVID-19 concern questionnaire with 13 items taken from previous studies (Bergman *et al.*, 2020; Taylor *et al.*, 2020). The items regarded the caregiver's worries about the COVID-19 pandemic. The items were rated on a scale of 0 (*not worried at all*) to 4 (*very worried*). The final score was the ratings' average ($\alpha = .87$).

An ICD-11 PTSD symptom questionnaire (Cloitre *et al.*, 2018) with six statements measuring posttraumatic stress. The items were rated on a scale of 0 (*not at all*) to 4 (*to a large extent*). When filling out the questionnaire, caregivers were asked to report their mother's ($\alpha = .76$) and father's ($\alpha = .78$) symptoms separately. Offspring reports of parental PTSD symptoms were found to be reliable and correlated with self-reports by parents in previous studies (Yehuda *et al.*, 2006). Caregivers completed the questionnaire for themselves as well ($\alpha = .85$). Clinical PTSD levels were determined when at least one symptom in each of the three syndromes (re-experiencing, avoidance, and hyperarousal) were rated as moderately severe or higher.

For more details on the measures, please see Supplementary file.

Table 1 Group Differences in the Study Variables

	(1) HOLOCAUST OFFSPRING WITH PARENTAL PTSD	(2) HOLOCAUST OFFSPRING WITHOUT PARENTAL PTSD	(3) COMPARISON GROUP	STATISTICAL TESTS	SIGNIFICANCE LEVEL	EFFECT SIZE
<i>N</i>	20	60	29			
Age						
<i>M</i>	58.70	58.21	55.86	$F(2,106) = 0.92$	$p = .39$	
<i>SD</i>	8.17	7.97	9.70			
Gender <i>n</i> (%)						
Female	18 (90.0)	41 (68.3)	22 (75.9)	$\chi^2(2) = 3.73$	$p = .15$	
Male	2 (10.0)	19 (31.7)	7 (24.1)			
Education <i>n</i> (%)						
Partial high school	0 (0.0)	1 (1.7)	0 (0.0)	<i>Fisher's exact test</i>	$p = .11$	
Full high school	0 (0.0)	7 (11.7)	0 (0.0)			
Tertiary non-academic education	3 (15.0)	11 (18.3)	2 (6.9)			
Academic degree	17 (85.0)	41 (68.3)	27 (93.1)			
Marital status <i>n</i> (%)						
Married	16 (80.0)	52 (86.7)	24 (82.8)	$\chi^2(2) = 0.58$	$p = .74$	
Not married	4 (20.0)	6 (13.3)	5 (17.2)			
Self-rated financial status						
<i>M</i>	4.05	3.77	3.76	$F(2,106) = 0.81$	$p = .44$	
<i>SD</i>	0.82	0.90	0.95			
Religiosity <i>n</i> (%)						
Secular	17 (85.0)	46 (76.7)	25 (86.2)	<i>Fisher's exact test</i>	$p = .30$	
Traditional Religious	3 (15.0)	5 (8.3)	2 (6.9)			
	0 (0.0)	9 (15.0)	2 (6.9)			
Self-rated health						
<i>M</i>	4.10	4.05	4.21	$F(2,106) = 0.32$	$p = .72$	
<i>SD</i>	0.78	0.96	0.67			
Number of children						
<i>M</i>	2.78	2.78	2.83	$F(2,103) = 0.01$	$p = .98$	
<i>SD</i>	0.73	1.39	0.88			
Parent age¹						
<i>M</i>	88.60	87.25	84.74	$F(2,106) = 1.95$	$p = .14$	
<i>SD</i>	7.71	6.96	7.14			
Parent help (time)						
<i>M</i>	4.45	3.88	3.21	$F(2,106) = 1.98$	$p = .14$	
<i>SD</i>	1.98	2.24	2.19			
Geographical distance from parents						
<i>M</i>	3.35	3.37	2.96	$F(2,104) = 2.26$	$p = .10$	
<i>SD</i>	1.08	0.82	0.74			

Table 1 Continued

	(1) HOLOCAUST OFFSPRING WITH PARENTAL PTSD	(2) HOLOCAUST OFFSPRING WITHOUT PARENTAL PTSD	(3) COMPARISON GROUP	STATISTICAL TESTS	SIGNIFICANCE LEVEL	EFFECT SIZE
	20	60	29			
<i>N</i>						
Number of people helping						
<i>M</i>	1.35	1.18	1.10	$F(2,106) = 0.71$	$p = .49$	
<i>SD</i>	0.74	0.70	0.72			
Help provided to parent²						
<i>M</i>	3.06	2.67	2.19	$F(2,101) = 7.13$	$p = .001$	$\eta^2 = 0.124$
<i>SD</i>	0.80	0.81	0.81			
Burden time³						
<i>M</i>	2.67	2.13	1.82	$F(2,105) = 6.15$	$p = .003$	$\eta^2 = 0.10$
<i>SD</i>	0.86	0.82	0.84			
Burden development³						
<i>M</i>	1.84	1.61	1.34	$F(2,104) = 3.50$	$p = .03$	$\eta^2 = 0.063$
<i>SD</i>	0.74	0.66	0.62			
Burden physical³						
<i>M</i>	2.16	1.79	1.60	$F(2,104) = 3.59$	$p = .03$	$\eta^2 = 0.065$
<i>SD</i>	0.63	0.74	0.72			
Burden social³						
<i>M</i>	2.03	1.68	1.32	$F(2,102) = 7.30$	$p = .001$	$\eta^2 = 0.125$
<i>SD</i>	0.55	0.75	0.41			
Burden emotional³						
<i>M</i>	1.80	1.50	1.49	$F(2,103) = 2.28$	$p = .10$	
<i>SD</i>	0.76	0.52	0.51			
Caregiving burden change⁴						
<i>M</i>	-0.60	-0.36	-0.06	$F(2,103) = 6.05$	$p = .003$	$\eta^2 = 0.105$
<i>SD</i>	0.50	0.55	0.52			
Change in parent-child relationship⁴						
<i>M</i>	0.00	0.14	0.25	$F(2,101) = 0.96$	$p = .38$	
<i>SD</i>	0.45	0.61	0.70			
Change in parent's relationship with others⁴						
<i>M</i>	-0.60	-0.38	-0.24	$F(2,103) = 2.20$	$p = .11$	
<i>SD</i>	0.68	0.52	0.63			
Change in parent's accessibility⁴						
<i>M</i>	-1.05	-0.77	-0.34	$F(2,103) = 7.23$	$p = .001$	$\eta^2 = 0.123$
<i>SD</i>	0.60	0.68	0.66			

¹ When both parents were alive, we computed the average age of both parents. ²A scale assessing help provided to the care recipient with day-to-day tasks (based on Lawton and Brody, 1969). ³The multidimensional caregiver burden inventory (Novak and Guest, 1989). ⁴The perceived change in caregiver burden items: these items were worded especially for the current study.

Data analysis

One-way analyses of variance (ANOVAs), Chi-square tests, and Fisher's exact tests assessed group differences in background variables. To test the study hypotheses, ANOVAs assessed group differences in caregiver burden subscales and perceived change in caregiver burden. Significant main effects were followed by Bonferroni post hoc tests. Additional analyses of covariance controlled for caregivers' PTSD symptoms.

Results

There were no significant differences in background variables between the three groups (see Table 1). Similarly, there were no differences between groups in care recipient-related variables (e.g. care recipient's age, how long the caregiver had been helping the care recipient etc., including the distribution of caregivers whose father, $\chi^2[2] = 5.15$, $p = .07$, or mother, Fisher's exact test, $p = .93$, was alive). A significant difference was found between the groups in the extent of support that caregivers were providing their care recipients ($p = .001$, $\eta^2 = 0.124$). Bonferroni post hoc tests found that OHS with and without parental PTSD reported helping their care recipients more than the comparison group. No differences between the groups were found in SARS-CoV-2 exposure ($F[2,108] = 0.10$, $p = .90$) or COVID-19 concern ($F[2,108] = 1.52$, $p = .22$).

A significant difference in time-dependent burden was found between the groups ($p = .003$, $\eta^2 = 0.10$). Bonferroni post hoc tests showed that OHS with parental PTSD reported a heavier caregiver burden than the other two groups. There were also significant group differences in developmental ($p = .03$, $\eta^2 = 0.063$), physical ($p = .03$, $\eta^2 = 0.065$), and social burdens ($p = .001$, $\eta^2 = 0.125$). In all these cases, OHS with parental PTSD reported heavier burdens than the comparison group.

There was also a significant difference between the groups in the perceived change in caregiver burden ($p = .003$, $\eta^2 = 0.105$) and in the care recipient's access to essential services and day-to-day errands ($p = .001$, $\eta^2 = 0.123$). Bonferroni post hoc tests showed that both OHS groups perceived a greater increase in caregiver burden and a greater negative change in care recipient's access than the comparison group. (Table 1)

Additional analyses controlling for the caregivers' PTSD symptoms (15.6% of them showed clinical levels) once again showed significant group differences in time-dependent burden ($F[2,95] = 5.29$, $p = .007$, $\eta^2 = .10$), developmental burden

($F[2,94] = 3.69$, $p = .02$, $\eta^2 = .07$), social burden ($F[2,92] = 9.04$, $p < .0001$, $\eta^2 = .16$), the perceived change in caregiver burden during the pandemic ($F[2,93] = 4.13$, $p = .01$, $\eta^2 = .08$), and changes to care recipient's accessibility of essential services/day-to-day errands ($F[2,93] = 4.28$, $p = .01$, $\eta^2 = .08$).

Discussion

This study examined caregiver burden among caregivers taking care of their parents during the COVID-19 pandemic. OHS reported assisting their care recipients more than the comparison group did. This finding may reflect a general pattern found in previous studies, namely, that OHS feel a stronger obligation to help their parent (Shrira *et al.*, 2019). It is also possible that this finding reflects the higher support needs of Holocaust survivors who had been traumatized during the war and must now cope with the pandemic. It should be acknowledged that, potentially, Holocaust survivors can display both resilience and vulnerability when faced with the pandemic (e.g. Maytles *et al.*, 2021).

Our first hypothesis was, for the most part, supported by the finding that OHS with parental PTSD reported the highest caregiver burden in several aspects. The size for the group effects ranged between medium to large. This finding is in line with a previous study done before the pandemic, where OHS whose care recipient parents had PTSD reported higher levels of filial anxiety and obligation than the comparison group (Shrira *et al.*, 2019).

Our second hypothesis was that because of the pandemic, OHS with parental PTSD would experience an increase in caregiver burden. In effect, OHS reported an increase in caregiver burden and a greater negative change in the accessibility of day-to-day errands/essential services for their care recipients relative to the comparison group—regardless of whether their care recipients had PTSD. The size for the group effects ranged between medium to large.

The increased caregiver burden during the pandemic is in line with previous studies performed during the pandemic showing an increase in caregiver burden among informal caregivers (Archer *et al.*, 2021). A possible explanation for the finding that OHS have experienced a greater increase in caregiver burden than the comparison group has to do with the obligation OHS feel toward their traumatized parents and the survivors' higher support needs as they face the effects of aging alongside the effects of the Holocaust trauma in a time of pandemic (Maytles *et al.*, 2021).

The findings of this study should be interpreted in light of its limitations. First, the study used a convenience sampling method. Second, the sample size is relatively small because of the difficulty of finding caregivers whose care recipients have been through the Holocaust and are still alive. The small sample size precluded the use of multivariate models. Third, caregivers did not undergo a clinical interview and were not formally diagnosed with PTSD. Fourth, in this study, caregivers reported their care recipient's PTSD symptoms. This may have caused a bias—with caregivers either being unaware of their care recipient's symptoms or reporting symptoms that had manifested in the past but have since subsided. Finally, perceived change in burden required caregivers to recall care demands pre-pandemic, and we cannot be certain whether it reflected objective burden increase.

Further research is needed to study other aspects of caregiver burden carried by OHS. For instance, an additional study could examine caregiver burden in the aftermath of the COVID-19 crisis, when all social distancing measures are lifted. Furthermore, a follow-up study could include additional variables that increase or decrease caregiver burden in this population.

The findings of this study shed light on the way OHS cope with the task of caring for their parents during the COVID-19 pandemic. These findings show that some OHS are at risk of experiencing more distress and may need help and support. Further research is needed to determine whether people taking care of their posttraumatic parents in contexts with additional background trauma also feel a heavier caregiver burden—both in general and specifically during the current pandemic.

Conflict of interest

None.

Description of authors' role

Prof. Shrira and Dr. Maytles wrote the paper. Prof. Shrira provided the method and results sections. Ms. Frenkel-Yosef and Dr. Maytles collected the data.

Supplementary material

To view supplementary material for this article, please visit <https://doi.org/10.1017/S1041610221001125>

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