Assessment of burden among caregivers of hemodialysis patients at a Tertiary Care Hospital of Andhra Pradesh

Sir,

One hundred caregivers of hemodialysis patients, aged 20– 65 years, attending a tertiary care hospital were evaluated for psychological burden using Zarit Burden Interview (ZBI) instrument after obtaining their consent.^[1] Caregivers, other than family members (relatives, friends, and children below 20 years) were excluded. The ZBI contains 22 items focusing on caregiver's health, psychological well-being, finances, social life, and the relationship between the caregiver and the patient.^[2] In this study, five items (3, 11, 12, 14, and 17) with a corrected item-total correlation value of <0.3 were deleted. The total burden score was classified as little burden to no burden (0–20), mild to moderate burden (21–40), moderate to severe burden (41–60), and very severe burden (61–88).

Most caregivers were young (53%), female (84%), homemakers (84%), married (86%), following the Hindu religion (85%), living in rural areas (42%), and in nuclear families (78%). A higher percentage of caregivers had a school education (28%), family income of Rs. 5000/month (68%), and were spouses of the patient (45%). The validity of the instrument was done by Cronbach's alpha and was found to be 0.7. The score ranged from 12 to 44 [Table 1]. A higher percentage of caregivers (85%) had reported mild to moderate burden. A higher mean burden score was observed in males than female caregivers (34.31 ± 3.30 vs. 30.42 ± 6.05, P < 0.05). Earlier studies had observed an association of burden score with age.^[3,4] In a univariate regression

Table 1: Mean scores and SD of individual items of burden score

burden score	
ZBI item	Mean±SD
Do you feel you will be ready for caring your relative?	3.65±0.65
Do you feel that you have more burden on your	3.21±1.05
shoulders for taking care of your relative?	
Do you feel that it is hard to treat the experimental	0.31±0.8
problems of your relative?	
Do you afraid what the future holds for your relative?	3.39±0.85
Do you afraid what the future holds for your relative?	3.06±0.99
Do you feel that you are trying to care your relative	3.41±0.83
physically?	
Do you feel that you are trying to care your relative	3.38±0.82
psychologically?	
Do you feel alone or being separated because of your relative illness?	0.31±0.87
	0.05.0.70
Do you feel your health has suffered because of your involvement with your relative?	0.25±0.70
Do you feel you have freedom because of your relative?	3.05±1.15
Do you feel that you are ready to spoil your financial	3.19±1.16
status for your relative illness?	5.19±1.10
Do you feel your physical environment is causing	3.21±1.2
discomfort for caring your relative?	0.2111.2
Do you feel that taking care of your relative has	0.24±0.7
disturbed your sleep?	
Do you feel that you have become disappointed and	0.09±0.45
angry because of your relative?	
Do you feel that you are not finishing your works	0.23±0.6
because of your relative's illness?	
Do you feel that your life is not going smoothly?	0.06±0.3
Do you feel that you want to escape from the problem	0.01±0.1
because of the situations you have faced?	
SD: Standard deviation, ZBI: Zarit Burden Interview	

analysis, statistically significant association between total burden score and male caregivers (standardized beta coefficient 0.244, P < 0.01) was observed. This indicates that more attention needs to be paid on male caregivers for reducing the burden among them.

No association was observed between burden score and duration of dialysis. This may due to the short duration of hemodialysis. The average duration of hemodialysis was 1 year. A high caregiver burden score is expected with an increased duration of disease. In our study, the majority of the caregivers were either spouses or parents and, therefore, it is possible that caregivers will not feel a burden in attending their immediate relative. This is confirmed by mild to moderate burden score in the majority of the caregivers. The dialysis patients were either government employees or beneficiaries of state government scheme NTR Vaidya Seva. Employees are reimbursed and those covered under the NTR Vaidya Seva scheme, avail the procedure free of cost. We feel that this may also be one of the reasons for not finding the association of burden score with duration of illness, as the caregivers need not be concerned about the financial resources. There is no consensus in literature on the association of caregiver burden score and duration of disease. One study had not found any association^[4] while

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Conflicts of interest

There are no conflicts of interest.

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References

- Zarit SH, Reever KE, Bach-Peterson J. Relatives of the impaired elderly: Correlates of feelings of burden. Gerontologist 1980;20:649-55.
- Seng BK, Luo N, Ng WY, Lim J, Chionh HL, Goh J, *et al.* Validity and reliability of the Zarit Burden Interview in assessing caregiving burden. Ann Acad Med Singapore 2010;39:758-63.
- Suri RS, Larive B, Garg AX, Hall YN, Pierratos A, Chertow GM, et al. Burden on caregivers as perceived by hemodialysis patients in the frequent hemodialysis network (FHN) trials. Nephrol Dial Transplant 2011;26:2316-22.
- 4. Bayoumi MM. Subjective burden on family carers of hemodialysis patients. Open J Nephrol 2014;4:79-85.
- Gülpak M, Kocaöz S. The care burden and the affecting factors of individuals receiving hemodialysis treatment. TAF Prev Med Bull 2014;13:99-108.

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