

Original Research Article

Assessment of mental health status among caregivers of persons with permanent disabilities attending rehabilitation centre in H. D. Kote taluk, Mysore district

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ABSTRACT

Background: People with disabilities have constant health needs for very long periods in their life. They may have limitations in the activities of daily living and communication abilities. Disability is highly demanding, requiring consistent care. The physical and psychological well-being of a caregiver is important for the well-being of the person receiving care. The objective of the study was to assess the mental health status of caregivers of persons with permanent disabilities.

Methods: A hospital based cross sectional study was carried out from July 2014 to December 2014. 100 caregivers of cases registered under “Chaithanya Vahani” programme by SVYM Hospital were selected for study. GHQ-28 questionnaire was used to in the structured proforma to assess mental health status of caregivers.

Results: Mean age was found to be 38.25 years with 87 (87%) females and 13 (13%) males. Mean GHQ-28 score was found to be 8.09 with a standard deviation of ± 4.85 which is quite higher than the cut off value of 4. 76% of caregivers had a score higher than the mean score indicating mental stress. Social impairment domain of GHQ-28 was found to be significantly associated with gender ($p=0.009$), age ($p=0.009$) and duration of care ($p=0.008$). Anxiety domain was significantly associated with duration of care ($p=0.033$) and severe depression domain was found to be associated with marital status ($p=0.003$).

Conclusions: Association between mental health status of caregivers and gender, age, marital status and duration of care giving was found to be statistically significant. Psychological counselling is to be done at regular intervals for caregivers to help them in overcoming stress, anxiety and depression. Screening of caregivers should be done at regular intervals to detect any kind of mental distress at the earliest.

Keywords: Caregivers, Disabilities, GHQ-28

INTRODUCTION

Disability is any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being. Disabilities are of five types namely locomotors, visual, hearing, speaking and mental

disabilities.¹ The physical and psychological well-being of a caregiver is important for the well-being of the person receiving care. Disability is highly demanding, requiring consistent care. People with disabilities have constant health needs for very long periods in their life. They may have limitations in the activities of daily living and communication abilities. Apart from the area of

health, they have social, educational, empowerment and livelihood needs. Thus the primary caregivers, usually the parents, are under constant stress to maintain the health and well-being of the patient. Caregivers of people with chronic health conditions run the risk of emotional distress and poor adjustment to the demand of the patient. The association between physical and psychological health and being an informal caregivers are well established.^{2,3}

Assessment of mental health status of the primary caregivers is required for interventions targeted at rehabilitation. This assumes further importance in rural areas where they have limited access to rehabilitation services. Hence the present study is conducted with the objective of assessing the mental health status of caregivers attending a rehabilitation centre in H. D. Kote taluq.

Objective

The objective of the study was to assess the mental health status of caregivers of patients with permanent disabilities.

METHODS

A Hospital based cross sectional study was conducted during the period July 2014 to December 2014. Approval was obtained from the ethics committee of JSS Medical College and SVYM Hospital. Required permission was obtained from the authorities of the hospital to conduct the study. Study subjects were 100 caregivers of cases registered under “Chaitanya Vahini” programme run by SVYM Hospital, Sargur, H. D. Kote taluk. Care givers of bed ridden/seriously ill patients were excluded from the study. Sample size was estimated by using the formula ($n=4pq/l^2$), where p=prevalence of disability as per NSSO-2002=2.2%, with an absolute allowable error of 3%, $n=95.6$ rounded off to 100 study care givers.⁴ Prior informed consent in the local language Kannada was taken from all the caregivers who were included in the

study. For those who were illiterates, the consent was read out and explained to them in their language and consent was obtained by taking their thumb impression in the presence of a witness. A pre tested and structured questionnaire was administered to all the care givers and the data was collected regarding Socio-demographic profile, GHQ-28 for assessing mental health status were included in the proforma⁵. Data thus obtained was coded and entered into Microsoft excel and analyzed using SPSS 22.0 Version. Descriptive statistical analysis, t-test, ManWhitney U, ANOVA and chi-square test were applied. The statistical significance level was taken as $p<0.05$.

RESULTS

Table 1 shows statistical significant association between gender and social impairment domain of GHQ-28 ($p<0.05$). The GHQ-28 score pertaining to social impairment was better in females (mean-2.94, $SD\pm 1.96$) compared to males (mean-4.46, $SD\pm 1.61$). Table 2 shows statistical significant association between age and social impairment domain of GHQ-28 ($p<0.05$). Mean social impairment domain of GHQ was significantly lower for caregivers below 18 years (mean 0.22, $SD\pm 0.44$). Table no. 3 shows domains of GHQ-28 such as social impairment and anxiety had statistical significant association in relation to duration of care. As the duration of care giving increases, there is increase in anxiety (mean 2.84, $SD\pm 2.18$) and social impairment (mean 3.66, $SD\pm 1.96$). This is reflected by the mean score of GHQ domains for below and above 5 years of care giving ($p=0.008$ and 0.033) respectively. Table 4 shows association between severe depression domain of GHQ-28 and marital status ($p<0.05$). Mean score for the married care giver was found to be lower than the other caregivers. Table 5 shows correlation is significant at the 0.01 level (2 tailed). Correlation is significant at the 0.05 level (2 tailed). Figure 1 shows that, as the duration of care giving increases, there is increased anxiety. This is reflected by positive correlation between anxiety and duration of care.

Table 1: GHQ-28 scores for male and female.

GHQ-28 domains	Sex	Mean	Std. deviation	Sig. (2-tailed)
Somatic	Male	1.61	1.38	0.709
	Female	1.78	1.50	
Anxiety	Male	2.38	1.60	0.679
	Female	2.12	2.15	
Social impairment	Male	4.46	1.61	0.009
	Female	2.94	1.96	
Severe depression	Male	0.84	1.72	0.700
	Female	1.05	1.85	
GHQ-28 total score	Male	1.92	0.27	0.143
	Female	1.73	0.44	

Table 2: GHQ-28 score to age of caregivers.

GHQ-28 domains	Mean	Std. deviation	Sig. (2-tailed)
Somatic			
Below 18 years	1.00	1.00	0.709
19-25	1.93	1.03	
26-35	1.82	1.38	
36-45	1.33	1.49	
45 and above	2.20	1.77	
Anxiety			
Below 18 years	0.20	0.44	0.679
19-25	1.60	1.95	
26-35	2.03	2.06	
36-45	2.77	2.13	
45 and above	2.36	2.09	
Social impairment			
Below 18 years	2.20	3.03	0.009
19-25	3.26	2.01	
26-35	2.78	1.77	
36-45	3.51	1.98	
45 and above	3.24	2.00	
Severe depression			
Below 18 years	0.20	0.44	0.700
19-25	1.33	2.09	
26-35	1.00	1.88	
36-45	1.18	2.18	
45 and above	0.88	1.33	
GHQ total score			
Below 18 yrs	3.60	3.20	0.335
19-25	8.13	3.96	
26-35	7.64	4.77	
36-45	8.81	5.32	
45 and above	8.68	4.97	

Table 3: GHQ-28 score to duration of care.

Domains	Duration of care	Mean	Std. Deviation	Sig. (2tailed)
Somatic	Below 5 years	1.59	1.32	0.154
	Above 5 years	2.02	1.64	
Anxiety	Below 5 years	1.72	1.90	0.008
	Above 5 years	2.84	2.18	
Social impairment	Below 5 years	2.80	1.93	0.033
	Above 5 years	3.66	1.96	
Severe depression	Below 5 years	1.03	1.89	0.985
	Above 5 years	1.02	1.73	
GHQ-28 total score	Below 5 years	1.70	0.45	0.109
	Above 5 years	1.84	0.365	

Table 4: GHQ-28 scores to marital status of caregivers.

Domains	Marital status	Mean	Std. deviation	Sig.
Somatic	Single	0.25	0.50	0.23
	Married	1.65	1.40	
	Separated	1.00	.	
	Living as married	2.00	.	
	Widow	3.00	1.54	
	Widower	2.00	1.87	

Anxiety	Single	0.50	0.55	0.192
	Married	2.07	1.95	
	Separated	4.00	0.00	
	Living as married	0.00	0.00	
	Widow	3.18	2.75	
	Widower	2.60	2.50	
Social impairment	Single	4.50	3.10	0.195
	Married	3.15	1.94	
	Separated	7.00	0.00	
	Living as married	3.00	0.00	
	Widow	2.45	1.72	
	Widower	2.60	1.51	
Severe depression	Single	0.75	0.95	0.003
	Married	0.79	1.79	
	Separated	0.00	0.00	
	Living as married	6.00	0.00	
	Widow	2.54	1.50	
	Widower	0.80	0.83	
GHQ total score	Single	1.75	0.50	0.746
	Married	1.74	0.43	
	Separated	2.00	0.00	
	Living as married	2.00	0.00	
	Widow	1.90	0.30	
	Widower	1.60	0.54	

Table 5: Correlation between domains of GHQ-28 and duration of care.

Domains	R	P
Somatic	0.188	0.061
Anxiety	0.276**	0.005
Social impairment	0.150	0.135
Severe depression	-0.031	0.760
GHQ-28 total score	0.226*	0.024

** correlation is significant at the 0.01 level (2 tailed); * correlation is significant at the 0.05 level (2 tailed).

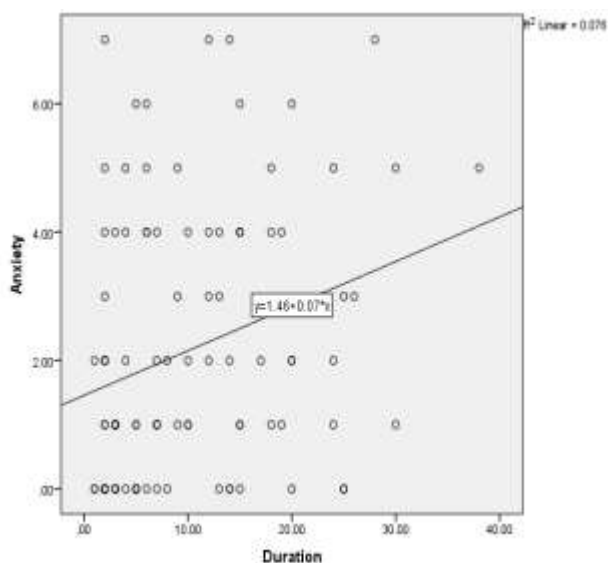


Figure 1: Correlation between anxiety domain of GHQ-28 and duration of care.

DISCUSSION

1. GHQ-28 scores for male and female

There was statistically significant association between gender and social impairment domain of GHQ-28. The GHQ-28 score pertaining to social impairment were better in females (mean-2.94, \pm SD-1.96) compared to males (mean-4.46, \pm SD-1.61). This implies that females have more psychological stability compared to males (p-value=0.009).

Contrary to our study findings, gender was found to have insignificant effect on GHQ-28 score in a study conducted by Hosseini.⁶

In a study conducted by Ijarogbe, Okulate, Ladapo, Lawal, it was noted that gender was negatively associated with anxiety.⁷

2. GHQ-28 score and age of caregivers

There was statistically significant association between age and social impairment domain of GHQ-28. Mean social impairment score of GHQ was significantly lower for caregivers below 18 years (mean-0.22, \pm SD- 0.44) which implies higher mental stability. It may be due to less exposure to care giving. On contrary, higher social impairment mean score for caregivers of age group 36-45 (mean-3.51, \pm SD- 1.98) showed mental problems (p=0.009)

In a study conducted by Ijarogbe, Okulate, Ladapo, Lawal, there was positive correlation between age of caregivers and depression, but there was no significant association between age and social impairment.⁷

3. GHQ-28 score and duration of care

Domains of GHQ-28 such as social impairment and anxiety had statistically significant association to duration of care. As duration of care giving increases, there is increase in anxiety (mean 2.84, \pm SD-2.18) and social impairment (mean-3.66, \pm SD-1.96) This is reflected by the mean score of GHQ domains for below and above 5 years of care giving (p =0.008 and 0.033 respectively).

In a study conducted by James et al in 2010 it was observed that GHQ-28 scores increased with increase in number of hours of care.⁸

4. GHQ-28 scores and marital status of caregivers

There was statistically significant association between severe depression domain of GHQ-28 and marital status. Mean score for married caregiver was found to be lower than the other categories (p=0.003).

In a study conducted by Hosseini, GHQ-28 scores were co-related with marital status of caregivers but not statistical significance (p=0.08).⁶

5. Correlation between domains of GHQ-28 and duration of care

The present study reveals, as duration of care giving increases, there is increase anxiety. This is reflected by positive correlation between anxiety and duration of care.

CONCLUSION

The mean total GHQ-28 score was 8.9; this indicates the population with potential mental problems. The GHQ-28 score pertaining to social impairment were better in caregivers who are females and caregivers below 18 years. This implies that females have more psychological stability compared to males. On the other hand mean social impairment score of GHQ was significantly lower for caregivers below 18 years which implies mental stability. As duration of care giving increases, there is

increase in anxiety and social impairment. This is reflected by the mean score of GHQ domains for below and above 5 years of care giving and by positive correlation between anxiety and total GHQ score. Hence there is a need for psychological counselling to be done at regular interval for caregivers to help them in overcoming stress, anxiety and depression. Awareness to the caregivers regarding the patient's illness is important. Screening of caregivers at regular intervals to detect any mental distress at a early stage is required. District rehabilitation centre can be involved in training the care givers. Social assistance from both governmental and non-governmental organizations to both the caregiver and receiver.

Limitations

Hospital based study; hence the results cannot be generalized to the population. More female study subjects in comparison to males.

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