

## Assessment of Quality of Life and Strain Burden on Cancer Caregivers

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**Abstract:** The main aim of the study is to assess the effects of cancer caregiver's demographics on Quality Of Life (QOL) and Strain Burden (SB) and there inter-relation on overall wellbeing of cancer care givers. Cancer is the most common condition followed by Dementia, Alzheimer's disease associated with care giving. As cancer treatment progresses, the of care strain burden givers (CG) is likely to increase.

**Methods:** This is a prospective observational study, carried out at St. Ann's cancer and general hospital, and Sai Shree Hospital, Telangana, India involving 120 caregivers of patients undergoing cancer treatment irrespective of type of cancer. The CG Quality of Life-Cancer Scale (CQOLC) and the Modified CG Strain Index (CSI) were used to assess QOL and SB of CG respectively. Appropriate statistical tests were used to assess interrelation of QOL and SB.

**Results:** A significant correlation was found between CQOLC and CSI ( $R^2=0.76$ ). One way ANOVA revealed a significant difference in CQOLC and CSI of CG with respect to their relationship with the patient and their marital status ( $p<0.001$ ). However, no such significant difference was found with respect to gender of the CG.

**Conclusion:** This study examined many causes of CG's QOL and SB, like gender, relationship and marital status. As the cancer intensifies, the QOL of CG reduced and was found to be directly proportional to SB. Structured CG counseling is required to improve their QOL.

**Keywords:** Quality of Life, Cancer Care givers, Care giver Quality of Life-Cancer Scale

Date of Submission: 22-12-2017

Date of acceptance: 11-01-2018

### I. Introduction

The number of cancer survivors has steadily increased as a result of improved cancer treatments and early detection. Caregiver is an individual who has the responsibility of meeting the physical and psychological needs of the dependent cancer patient<sup>2</sup>. High stress levels in family caregivers also can interfere with their ability to provide the, physical, emotional or logistical and financial support patients need. Because of the changes and necessary adaptation in the family brought about by the care giving needs of the patient. So, those cancer patients are forced to depend on their family caregivers to complete their daily challenges. This gives impact on quality of life and stress burden on family caregiver. Several studies have reported that care giving is associated with negative physical health, fatigue, pain, sleep problems, impaired cognitive functions, and negative feelings within the care givers. In recent years, research has been directed towards the understanding of caregiver stress and burden. In India, very less systematic studies have been published to understand the negative feelings as well as Quality of life of care givers. 'More than 100 specific types of cancer frequently leave patients with residual disability and/or nonreversible pathological alteration, and require long periods of supervision, observation, or care<sup>5</sup>. Hence, study team felt a great need to understand the life and feelings of care givers.

### II. Materials And Methods

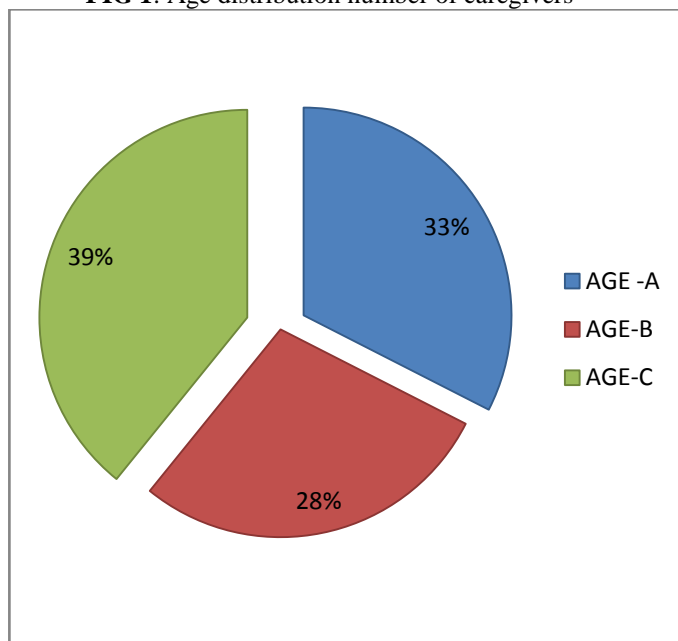
A prospective observational study was carried out at St Ann's cancer and general hospital, located Fathima nagar, Sai Shree Hospitals, Warangal, India. People who visited the study site for chemotherapy and ready to give inform consent were recruited in study. The enrollment of caregivers based on inclusion criteria are Caregivers aged more than 18 years, Caregivers staying with the patient since the onset of illness, Blood relatives of the cancer patients, Irrespective of blood relation, and spouses and excluded are Pediatrics and Adolescents caregiver, Family members, visitors but not involved in care giving, Non cooperative caregivers not willing to participate in the study. A suitable data collection form was designed, which includes the provision for

collection of information related to demographic details of patients (name, age, sex, and address), diagnoses, treatment process(chemotherapy, radiation, surgery+radiation, surgery+chemotherapy) ,and details about cancer caregivers ( Age, relation with patients, Sex, educational status, occupation, income, address).The CG Quality of Life-Cancer Scale (CQOLC) and the Modified CG Strain Index (CSI) were used to assess QOL and SB of CG respectively. Appropriate statistical tests were used to assess interrelation of QOL and SB.

### III. Results And Discussions

In the present study, a total number of 120 cancer caregivers It was found that maximum number of study population are in the age group of Age-B (18-30 years-28 %), followed by age group ranging in between Age-C(31-50 years -39%) then in the age group in between Age-A(50- 80 years -22.96%).

FIG 1: Age distribution number of caregivers



It was found that maximum number of caregivers uneducated (52 %), followed by educated (48%). Educated caregivers include under graduates, graduates and post graduates.

FIG 2: Educational status wise CQOL

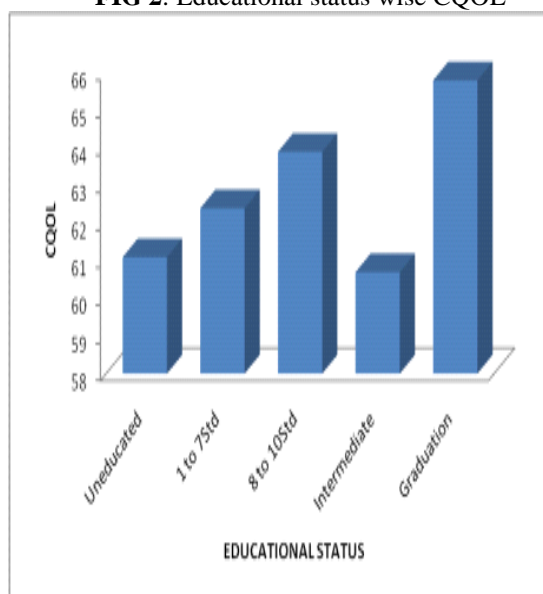


Fig 3: Educational Status Wise CSI

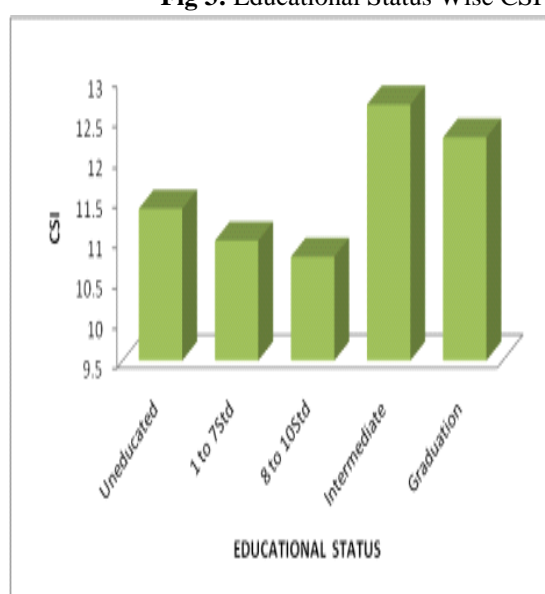


FIG 4: Marital Status Wise CQOL

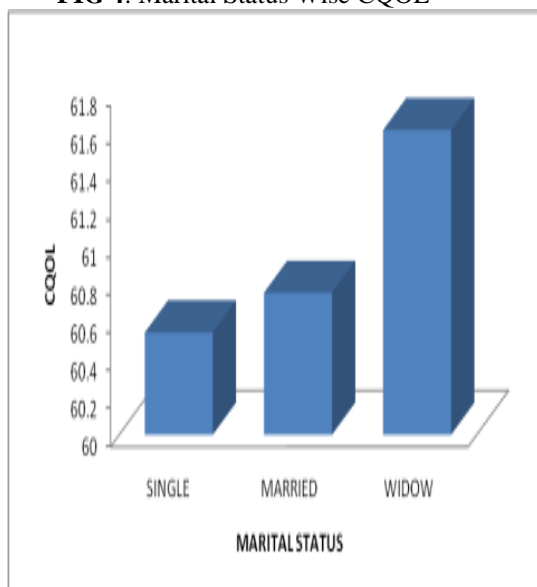
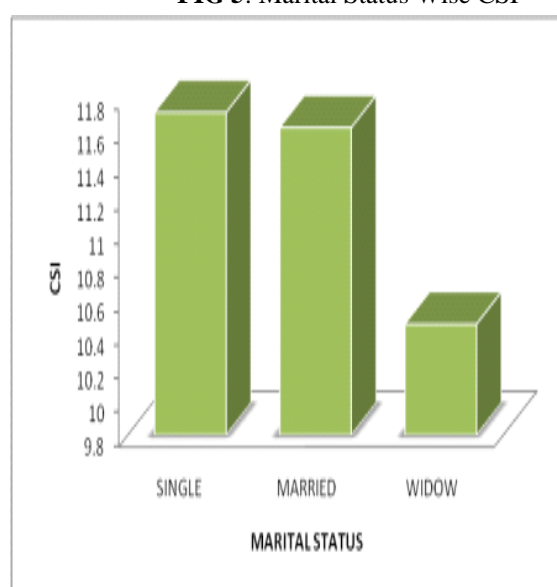


FIG 5: Marital Status Wise CSI



It was found that 9% caregivers are singles, 11% caregivers are widows, 80% caregivers are married.

Table 1: Gender Wise CQOL

ANOVA	SS	DF	MS	F (DFn, DFd)	P value
Male	2927000	5	585467	F (5, 566) = 276.9	P < 0.0001
Female	1197000	566	2114		
Total	4124000	571			

One-way between subjects ANOVA was conducted to compare the effect of Caregiver quality of life index on cancer caregivers in male and female. There was a significant effect CQOL on Cancer caregivers at the p<.05 level for the two conditions [F(5, 566) = 137.2], p = <0.001.

Table 2: Gender Wise CSI

ANOVA	SS	DF	MS	F(DFn,DFd)	P Value
MALE	2418000	5	483665	F (5, 566) = 222.4	F (5, 566) = 222.4
FEMALE	1231000	566	2175		
TOTAL	3649000	571			

One-way between subjects ANOVA was conducted to compare the effect of Caregiver quality of life index on cancer caregivers in male and female. There is a significant effect CSI on Cancer caregivers at the p<.05 level for the two conditions [F(5, 566) = 137.2], p = <0.001. One way ANOVA revealed a significant difference in CQOLC of CG with respect to their spirituality with the patient (p<0.001) with corroborate Cooper 2013 16 supports our results about spirituality, that caregivers encouraged their loved one to remain spiritually strong and connected.<sup>3</sup>

#### IV. Conclusion

This study conclude that the lack of assistance from healthcare providers continues to be an issue for caregivers and this study supports existing research<sup>4</sup> that caregivers are not receiving the support healthcare providers to strive. Additional help and attention to caregivers would be beneficial in improving quality of life of all family of patients. Lack of special attention to caregivers is serious gap in health care. It is essential that descriptive and longitudinal designs to be considered for care requirements. Further studies should take into consideration on safety, risk for negative outcomes, and adverse effects for both the caregiver and patients. Finally, interventions must be designed and introduced to professional or formal caregivers and family caregivers who offer vital skills and resources.

### **Abbreviations**

CQOL-C	Caregiver quality of life - cancer
CQOL	Caregiver Quality Of Life
CSI	Caregiver Strain Index
CG	Care Giver
SB	Strain Burden

### **Acknowledgements**

We would like to express our gratitude to the professors Late Prof Rao .S. Pippalla and Asst. Prof. H N Vishwas, Asst. Prof. Y.Surendra Reddy for providing their valuable guidance and suggestions throughout the course of the project.

### **References**

- [1]. Philip C. Higgins: Caregiver Evaluation of the Quality of End-Of-Life Care (CEQUEL) Scale: The Caregiver's Perception of Patient Care Near Death: PLoS ONE 8(6): e66066. doi:10.1371/journal.pone.0066066
- [2]. Joseph T. diPiro, Robert L. Talbert Et Al :Pharmacotherapy, A path physiological approach: page no2085:Seventh Edition.
- [3]. Dexter L. Cooper DL 1, Powe BD, Smith T. :Social support provided by and strainexperienced by African-American cancer caregivers:www.ncbi.nlm.nih.gov/pubmed/23708822:- eraC troppuS: 1 yb detiCCancer. Received: 20 August 2012 / Accepted: 7 May 2013Springer-Verlag Berlin Heidelberg2013 2013 Oct;21(10):2719-25. doi: 10.1007/s00520-013- 1849-9. Epub 2013 May25.
- [4]. Bornbaum, Catherine C., "Measuring the sixth vital sign: A descriptive analysis of distress in individuals with head and neck cancer.
- [5]. Nancy E. Adler And Ann E. K. Page, Editors Cancer Care For Thewhole Patient Meeting Psychosocial Health Needs Committee On Psychosocial Services To Cancer Patients/Families In A Community Setting Board On Health Care Services Institute Of Medicine Of The National Academies The National Academies Press Washington, D.C.www.Nap.Edu. Page no;1 to 33.

Dr.Avinash Tippani "Assesment of Quality of Life and Strain Burden on Cancer Caregivers." IOSR Journal of Dental and Medical Sciences (IOSR-JDMS), vol. 17, no. 01, 2018, pp. 45-48.