

Impact of stressful job on Quality of life and life satisfaction among doctors: comparative study between oncology and academic doctors

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Abstract

Medical professionals in general and practitioners of oncology specifically face a host of highly stressful issues on a daily basis during the routine practice of their profession. Such stresses include dealing with extremely, and often terminally, ill patients who require and deserve a great deal of emotional support as well as high quality and optimal medical care. The end result of these stresses is reflected in high rates of burnout among medical practitioners. These may affect personal, social and occupational life so our aim to investigate the hypothesis that stressful job could affect quality of life and life satisfaction of oncology doctors, even their method of coping with stress may also be affected. 45 oncology doctors who agree to share in the study were compared to 45 academic doctors regarding Dealing with Stressful Life Events Scale (D.S.L.E.S.), Quality of Life Scale (Q.L.S.) and Life Satisfaction Scale (L.S.S.). There were high statistically significant differences between both groups regarding the three variables as oncology doctors use negative approaches of coping style rather than positive one and less life satisfaction than academic doctor. Also academic doctor has better quality of life than oncology doctors. Our findings support the concern that medical oncology personnel are experiencing high levels of stress which affect quality of life and life satisfaction so early training of young residents for positive approaches of coping style may improve quality of care for patients and prevent burn out among oncologist.

Introduction

The effective functioning of any health service requires that its staff are maintained in good health themselves. It is clear that health professionals have an increased incidence of psychological morbidity, and there is anecdotal evidence suggesting that this affects their clinical practice. The mental health of staff and patients alike is affected by antecedent life experiences and contemporary work pressures (*Richard, 2003*). In general, health professionals have increased psychiatric morbidity, with high rates of anxiety, depression, suicide, alcohol and drug misuse (*Payne & Firth-Cozens, 1987; Heim, 1991; Guthrie & Black, 1997*). National Health Service (NHS) staff have higher rates of sickness absence than

comparable staff groups in other sectors, and levels of staff turnover and wastage are very high. A study of 11 600 NHS staff (*Borrill et al., 1996; Wall et al., 1997*) found an overall prevalence of psychological morbidity of 27%, compared with 18% in working people outside the NHS and 30% in the unemployed population. Female doctors and managers were found to be particularly at risk. Many types of clinical work are inherently stressful (*Payne & Firth-Cozens, 1987*). Areas where there is a high level of trauma or mortality (accident units, intensive care units, neonatal units) are perhaps the most obvious, but practitioners in all fields have to cope with heavy clinical workloads and ever-increasing administrative demands.

Concern has been expressed about the increase of threats and violence from patients and relatives. Many factors may result in what is called burnout syndrome which describes the end result of stress in the professional life of a physician or caregiver and combines emotional exhaustion, depersonalization and low personal accomplishment. Burnout is particularly relevant in oncology where staff work closely with patients who have life-threatening illnesses and therapy often has only a limited impact (*Eva et al., 2000*). Medical oncology personnel considered one of the most stressful medical specialty, so there are many anecdotal reports of burnout, decreased morale, high levels of stress and staff leaving or decreasing their work hours (*Barni et al., 1996*). In the study of Carmen et al 2003 Seven thousand seven hundred fifteen oncology physicians were queried by e-mail or during attendance at oncologic meetings and asked to complete a 22-question survey concerning their feelings of personal burnout and their perceptions of physician burnout in the oncology community. Overall, 61.7% of the respondents reported feelings of burnout, with the top three signs being frustration (78%), emotional exhaustion (69%), and lack of satisfaction with their work (50%). The highest-ranked causes for their feelings of burnout included overwork, lack of time away from the office, and reimbursement concerns. As there is few number of researches that systematically determined whether job stresses affect the way of coping, quality of life and life satisfaction of doctors or not, so in our study we investigate the hypothesis that stressful job could affect quality of life and life satisfaction of oncology doctors, even their method of coping with stress may also affected

Objectives

1. Determining way of coping style among oncology doctor versus Academic doctor.
2. To know the relation between type of coping style, quality of life and life satisfaction of oncology doctor.
3. Comparison between oncology doctors and Academic doctor regarding Quality of life and life satisfaction.

Subjects and methods

Our sample taken From department of radiotherapy at Ain Shams University hospital together with various academic department of faculty of medicine- Ain Shams University hospital. Oral informed consent obtained from 45 oncology doctor who agree to share in the study, they compared with 45 academic doctors.

Tools

1. Oral informed consent.
2. Dealing with Stressful Life Events Scale (D.S.L.E.S.): This Scale can measure different methods of dealing with stressful life events and consisted of 30 items, grouped into 3 groups. The first group is positive approach and consisted of 13 items, the second is negative approach and consisted of 7 items and the third is adaptational behaviors and consisted of 10 items (*Ali, 2003*).
3. PCASEE Quality of Life Scale: were applied at time of research this scale consisted of 6 subscales which measure different aspect of quality of life regarding physical, cognitive, affective, social, and economic and ego problems (*Beck et al., 1993*).

4. Life Satisfaction Scale (L.S.S.): This Scale is consisted of 30 items, and can measure degree of life satisfaction (*Dessoki, 1998*).

Statistical analysis:

SPSS statistical software package was used for data analysis (Version 13.1, 2003, Echsoft Corp., USA). Data were expressed as mean $\pm$ SD for non-numerical or quantitative data, while as % for numerical or categorized data. The following tests were used:

1. Wilcoxon Rank Sum test for comparison between two groups for non-parametric data.
2. Chi-square test for comparison between 2 independent groups as regards proportions or percentage for numerical data.

3. Ranked Sperman correlation test to evaluate the possible association between each 2 variables among the studied group.

4. (only for the last paper) Kruskall Wallis test for discriminating between more than 2 patient groups for non-parametric data.

The probability of error (p) at 0.05 was considered significant, while at 0.01 and 0.001 were highly significant.

Correlation between parameter: critical value (1- tall =0.249, 2- tall=0.294).

Procedures

An oral informed consent obtained from oncology doctors and academic one then D.S.L.E.S, L.S.S. and Q.L.S were performed to both group then statistical analysis done.

Results

Socio-demographic data

Table (1): Age difference among both groups

	Oncologist		Academic doctors	
	Mean	Std. Dev.	Mean	Std. Dev.
Age	34.47	4.78	36.73	5.31

The mean age among oncology doctors was 34.47 with standard deviation $\pm$ 4.78 while, among the academic doctors the mean was 36.73 $\pm$ 5.31. With no statistical significant difference between them as shown in **table (1)**.

Table (2): Gender and Marital status difference among both groups:

	Oncologist (%)	Academic doctors (%)
Gender		
Males	46.67%	37.78
Females	59.33%	62.22%
Marital status		
Married	75.56%	80%
Not married	24.44%	20%

- 59.33% of the oncologist were females while, among the other group the percent was 62.22. with no statistical significant difference between them
- 75.56% of the oncologists were married while; among the other group the percent was 80%. with no statistical significant difference between them as shown in **table (2)**

Table (3): Comparison between oncologist and academic doctors regarding Quality of life Scale (Q.L.S.)

	Oncologist			Academic doctors			P-value
	Mean	Std. Dev.	Total	Mean	Std. Dev.	Total	
Physical Problems	56.27	11.55	45	74.84	10.22	45	<0.001** H.S.
Cognitive Problems	58.44	18.80	45	81.07	12.60	45	<0.001** H.S.
Affective Problem	54.67	21.11	45	79.67	11.65	45	<0.001** H.S.
Social Problem	60.36	18.64	45	84.89	11.53	45	<0.001** H.S.
Economic Problem	52.53	19.23	45	81.51	8.83	45	<0.001** H.S.
Ego Problem	58.58	16.45	45	80.26	8.54	45	<0.001** H.S.

There was highly statistical significant difference between the two groups regarding Subscales of Quality of Life Scale $P = <0.001^{**}$ H.S. This means that academic doctors showed better quality of life (including physical, cognitive, affective, social, economic, and ego problems) than oncology doctors.

Table (4): Comparison between both groups regarding dealing with stressful life events scale (D.S.L.E.S.)

	Oncologist			Academic doctors			P-value
	Mean	Std. Dev.	Total	Mean	Std. Dev.	Total	
Positive Approach	26.98	2.82	45	31.07	2.12	45	<0.001** H.S.
Negative Approach	16.89	2.48	45	14.11	2.89	45	<0.001** H.S.
Adaptational behaviors	22.2	2.33	45	25.89	2.25	45	<0.001** H.S.
Total Scale	66.2	3.57	45	70.91	2.75	45	<0.001** H.S.

There was highly statistical significant difference between the two groups regarding Dealing with stressful Life Event Scale $P = <0.001^{**}$ H.S. As academic doctors utilize positive and

adaptational approach more than negative one. Although oncology doctors use negative and adaptational approaches more.

Table (5): Comparison between both group regarding life satisfaction scale (L.S.S.)

	<i>Oncologist</i>			<i>Academic doctors</i>			P-value
	Mean	Std. Dev.	Total	Mean	Std. Dev.	Total	
L.S.S	67.69	13.79	45	91.91	11.12	45	<0.001** H.S.

There was highly statistical significant difference between the two groups regarding Life Satisfaction Scale $P = <0.001^{**}$ H.S. This means that academic doctors showed higher life satisfaction than oncology doctors.

Discussion

In our study although both academic and oncology doctors are exposed to stress like other health professional as evidenced by Payne & Firth-Cozens (1987) but the way of coping with such stress is different as academic doctors utilize healthy coping strategy that is to say positive one more than oncologist who utilize mainly negative and adaptational approach. As coping style is one of the most important factors in the development of stress related disorder this may be the reason of high psychiatric morbidity among oncology doctors as shown by Eva et al (2000) who study 681 health professional working in Ontario Oncology Center regarding psychiatric morbidity and burnout syndrome and found that the physician group had the highest prevalence of psychological morbidity and 2 components of burnout. At the same time they compared their findings with those from 2 other studies of physician burnout (as measured by the MBI): one involving Canadian emergency physicians (Lloyd, Streiner and Shannon 1994) and the other medical include oncologists in the United Kingdom (Ramirez et al., 1995). More

physicians in their study than in the other 2 had low levels of personal accomplishment and high levels of emotional exhaustion. On the other hand academic doctors showed better quality of life than oncology doctors. This finding could be expected as life stress and job satisfaction could affect all aspects of quality of life, this was supported also by the findings of Eva et al 2000 that medical oncology personnel are experiencing burnout and high levels of stress and that large numbers are considering leaving or decreasing their work hours. Similar results regarding life satisfaction scale which show better life satisfaction among academic doctor rather than oncologist, Wippen et al 1991 found similar results when he make a study over 1,000 subscribers of the Journal of Clinical Oncology. About 60% of them were medical oncologists and the rest were radiation or surgical oncologists, he asked them about burn out and impact of job stress on social and personal life, eighty-five percent said that it was affecting their personal and social life. So both social, personal and occupational life are affect each other as in the Mayo Clinic study

2006, who found that As students approached the end of their medical training, they were less likely to be depressed or use excessive alcohol, however, they were more likely to be "burned out". Similar to our study, the study done by Sergeant et al 2004 who to determine the quality of life of orthopaedic residents and faculty and to identify the risk factors for decompensation. They identified a large disparity between the two groups, as the resident group reported much greater levels of dysfunction particularly with regard to burnout and psychiatric morbidity.

Conclusion

There are a number of restorative practices were cited. Exercise is well known to reduce stress and relieve depression (**Mount, 1986**). **Creagan** highlights the importance for oncologists of involvement in activities distinct from their professional lives and hypothesizes that these individuals make more productive and sympathetic practitioners. Although sabbaticals, vacation and personal time would clearly alleviate burnout (**Whippen et al., 1991**), other practical changes including flexible schedules, shared positions, on-premise childcare and prioritizing family time may be helpful (**Lagasse, 2000**). All these practice aim to reduce job stress and hence improve life satisfaction and quality of life, also early training of medical student and young residents to use positive approach for coping style may has great impact on personal, social and occupational life.

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مقياس مواجهة أحداث الحياة اليومية الضاغطة :
Leonard W. poon تعريب على عبد السلام على :
استاذ مساعد علم النفس كلية اداب جامعة الزقازيق فرع
بنها ٢٠٠٣ مكتبة النهضة المصرية

مقياس الرضا عن الحياة (Life Satisfaction scale)
تأليف ا.د مجدى محمد الدسوقي استاذ علم الاجتماع
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